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ABSTRACT

This guide is a collection of essays by various authors on tennis, badminton, and squash. The document is divided into three sections, one for each sport. The topics covered include general teaching methods, methods to employ for teaching specific skills such as the lob or the backhand, the use of visual aids, conditioning drills, study questions, and rules for each sport. Also included are bibliographies for all three sports and statements of NAGWS (National Association for Girls and Women in Sports) Rules. (JA)

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JUNE 1974 – JUNE 1976

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NATIONAL ASSOCIATION FOR GIRLS AND WOMEN IN SPORT

The National Association for Girls and Women in Sport is a nonprofit, educational organization designed to serve the needs and interests of administrators, teachers, leaders, and participants in sports programs for girls and women. It is one of seven associations of the American Alliance for Health, Physical Education, and Recreation.

PURPOSE

The purpose of the National Association for Girls and Women in Sport is to foster the development of sports programs for the enrichment of the life of the participant.

BELIEFS

The National Association for Girls and Women in Sport believes that:

Sports are an integral part of the culture in which we live.

Sports programs are a part of the total educational experience of the participant when conducted in educational institutions.

Opportunities for instruction and participation in sports appropriate to her skill level should be included in the experience of every girl.

Sports skills and sports participation are valuable social and recreational tools which may be used to enrich the lives of women in our society.

Competition and cooperation may be demonstrated in all sports programs, although the type and intensity of the competition and cooperation will vary with the degree or level of skill of the participants.

An understanding of the relationship between competition and cooperation and the utilization of both within the accepted framework of our society is one of the desirable outcomes of sports participation.

Physical activity is important in the maintenance of the general health of the participant.

Participation in sports contributes to the development of self-confidence and to the establishment of desirable interpersonal relationships.

FUNCTIONS

The National Association for Girls and Women in Sport promotes desirable sports programs through:

1. Formulating and publicizing guiding principles and standards for the administrator, leader, official, and player.
2. Publishing and interpreting rules governing sports for girls and women.
3. Providing the means for training, evaluating, and rating officials.
4. Disseminating information on the conduct of girls and women's sports.
5. Stimulating, evaluating, and disseminating research in the field of girls and women's sports.
6. Cooperating with allied groups interested in girls and women's sports in order to formulate policies and rules that affect the conduct of women's sports.
7. Providing opportunities for the development of leadership among girls and women for the conduct of their sports programs.

SPORTS GUIDES AND OFFICIAL RULES COMMITTEE INTEREST INDICATOR

The SGOR Committee is endeavoring to broaden its base of personnel and to strengthen its services to *Guide* readers. The purpose of this form is to offer readers an opportunity to join us in meeting this need. Please complete this form and send it to the SGOR Associate Chairman-elect, Helen Knierim, Wisconsin State Univ., Whitewater 53190.

Name _____

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1. Check the Sport Committee(s) which would be of interest to you:

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5. Are there others whom you would recommend for consideration as possible committee members or authors? Please indicate below. (Use additional paper, if necessary.)

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*You may serve on only one Sport Guide Committee at a time.

STANDARDS IN SPORTS FOR GIRLS AND WOMEN

Standards in sports activities for girls and women should be based upon the following:

1. Sports activities for girls and women should be taught, coached, and officiated by qualified women whenever and wherever possible.
2. Programs should provide every girl with a wide variety of activities.
3. The results of competition should be judged in terms of *benefits to the participants* rather than by the winning of championships or the athletic or commercial advantage to schools or organizations.

Health and Safety Standards for Players

Careful supervision of the health of all players must be provided by –

1. An examination by a qualified physician
2. Written permission by a qualified physician after serious illness or injury
3. Removal of players when they are injured or overfatigued or show signs of emotional instability
4. A healthful, safe, and sanitary environment for sports activity
5. Limitation of competition to a geographical area which will permit players to return at reasonable hours; provision of safe transportation.

General Policies

1. Select the members of all teams so that they play against those of approximately the same ability and maturity.
2. Arrange the schedule of games and practices so as not to place demands on the team or player which would jeopardize the educational objectives of the comprehensive sports program.
3. Discourage any girl from practicing with, or playing with, a team for more than one group while competing in that sport during the same sport season.
4. Promote social events in connection with all forms of competition.

SOURCES OF INFORMATION AND SERVICE

All requests for information about services should be addressed to: Program Coordinator, National Association for Girls and Women in Sport (NAGWS), AAHPER, 1201 - 16th Street, N.W., Washington, D.C. 20036.

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A Game Comes of Age

JOANNA DAVENPORT

An associate professor in physical education at the University of Illinois, Urbana, Joanna Davenport received her B.S. degree at Skidmore College, Saratoga Springs, New York, her M.S. at Smith College, Northampton, Massachusetts and her Ph.D. at Ohio State University, Columbus. A former tournament player and tennis coach, she is currently SGOR Chairman.

In December, 1967 one of the most significant events in lawn tennis history occurred. The British Lawn Tennis Association in defiance of the main governing body, the International Lawn Tennis Federation, declared that the 1968 Wimbledon tournament would be open to all tennis players, regardless of whether they were amateurs or professionals. The initial reaction from the ILTF was that if the event took place the BLTA would be expelled from the international federation and any amateur who competed would be suspended. After several months of world-wide publicity, negotiations and compromises, the ILTF backed down and approved a certain number of open tournaments throughout the world. Thus, after 40 years of controversy, open tennis became a reality. For a complete understanding of these historic decisions it is necessary to examine the very beginnings of the open tennis idea which originated in the United States.

History of the Open Tennis Idea

It was beyond imagination in the early years of tennis in this country that any aspect of professionalism would ever enter the game. Tennis flourished in its traditional setting of exclusive estates and private clubs. It was strictly a game for the wealthy class players who were definitely simon pure amateurs and had not only the leisure time for sports but also had access to courts. Since the USLTA was founded during these early years, it is not surprising that its stated policy was to prohibit its players or officials from deriving financial benefit from engaging in the game. However, as more people played tennis and the number of tournaments increased, the complexities of this expansion opened the door to commercialism and professionalism.

By 1913 tennis was no longer a game exclusively for the upper classes, and competition took on a new importance. Tournaments flourished on the local, sectional and national levels. The Davis Cup also had become fantastically prestigious as countries vied to be the

winner. Many of the new tournament players were not people of means and yet had to play tennis a great deal of the time in order to be successful. The definition of a true amateur (playing solely for the love of the game) began to be subject to attack. Top players seemed able to indulge in months of competitive tennis without visible means of support. Their expenses were paid from one tournament to another and they were given room and board while on the circuit. Tournaments, it was discovered, were profitable money-making affairs as spectators paid to see the matches. Not only were the tournaments making money but there was evidence that the top players were not just receiving expenses but were realizing a profit as they capitalized on their fame in tennis. Consequently, dictates, policies and alterations of the amateur rules seemed to be an issue at almost every annual meeting of the USLTA. Like the USLTA, the most important and difficult problem that the ILTF faced over the years was the preservation of true amateurism. It is important to realize that each member nation of the ILTF has similar rules and regulations regarding tournament players, i.e., a change in a rule by the USLTA must be sanctioned by the ILTF.

Eventually, as in other sports, there appeared professional tennis players who exhibited their skill for money. The inauguration of these professional exhibition matches was the beginning of consideration by the USLTA of open tournaments. It was natural that tennis clubs would try to hold these matches and to have their leading amateur players compete against the professionals. The Association did not disapprove in principle but wished to maintain control by having clubs ask permission to hold these matches. A club could not hold an open tournament until the USLTA decided it was the appropriate time to have one.

The first test came in 1930 when the Germantown Cricket Club requested permission to hold an open tournament. The Association gave its approval and proposed an amendment to the ILTF that open tournaments be permitted. The proposal was soundly defeated by the ILTF, and permission was denied to the Germantown Cricket Club. Three years later the situation was repeated. The Germantown Cricket Club again wanted to hold an open and the USLTA gave its approval. But again, the ILTF rejected the request and the open idea was defeated once more. In 1934 the USLTA itself wanted to stage an open tournament and the international body refused permission but did state that the topic would be studied. The ILTF finally relented on one issue and announced that there could be exhibition matches between amateurs and professionals but that tournaments with both groups of players were prohibited.

In 1938 the Lawn Tennis Association of India proposed to the ILTF that each Association be allowed to hold one open tournament

a year. The proposal was defeated and the issue died for some years to come.

The controversy regarding competition between amateurs and professionals was renewed with vigor in the 1950s when Jack Kramer organized a professional tour. Not only was he the best in the professional class but he was also a great promoter. He lured all the top amateurs into his ranks. Furthermore, Kramer did not deal just with American players but attracted foreigners as well. By 1957 the situation was ripe again for renewal of discussion regarding open tournaments. Most of the top players in the world had joined Kramer's group; there was increasing evidence that the remaining leading amateurs were making more money than ever from the game; and the press and public were asking for open competition. Both the USLTA and ILTF appointed committees to study the question and a vote was taken in 1960. It lost by the closest margin thus far, five votes. The results demand some explanation. The big tennis nations' total vote cast the die – they felt they could not raise the finances necessary to attract players to prize money events.

Though perhaps in different phrases, the USLTA submitted proposals again in 1961 and 1962 but the ILTF turned them down. Then, unbelievably, in 1963 forces in the USLTA were able to muster enough votes to put the Association on record as being against the principle of open tennis. Years of vigorous efforts for open competition were negated by this vote. It was shocking news to the tennis world as no country had been more persistent and sincere in its proposals for open tournaments than the United States.

Shortly after the USLTA's surprising change of opinion, the British LTA requested from the ILTF that it be allowed as an experiment to have Wimbledon an open tournament in 1965 and 1966. When the request was denied, it decided to assert its independence and have the 1968 Wimbledon an open event regardless of the consequences. Some authorities regarded the resolution as the most progressive action ever taken by a ruling tennis body. Furthermore, it should be noted that the BLTA took its stand because of altruistic reasons rather than financial concerns. Wimbledon had always done well financially even when the leading players turned professional. The Association sincerely wanted to end *under the table payments* and to have the best tennis players in the world in this notable tournament.

It is obvious that since the first open at Wimbledon in 1968 the tennis world has undergone unbelievable changes – all major tournaments are now open, and there are fantastic prize money, new scoring systems and greater media exposure. The transition has not always been easy, and there have been problems along the way. But open tennis tournaments are here to stay and the resulting changes have brought tennis into the modern era of sports.

A Softball Approach to Teaching Beginning Tennis

SHARON L. VAN OTEGHEN

Sharon Van Oteghen received her B.A. and M.A. degrees from the University of Iowa, Iowa City, and her Ph.D. from Indiana University, Bloomington. She has coached high school tennis and has headed the tennis program at a private girl's camp in New Hampshire for several summers. She is currently an assistant professor at Virginia Polytechnic Institute and State University in Blacksburg. Her master's thesis was concerned with the content of the following article.

Beginning tennis instruction often involves a six- to eight-week session with classes meeting twice per week. In general, students in such a course are interested in learning the basic strokes in as short a time as possible. In an age of increased leisure, physical educators must provide tennis instruction which will help students experience fairly consistent success in the basic tennis skills and prevent a discouraging beginning.

The author has taught several beginning tennis classes using a softball method of presenting the forehand and backhand drives and volleys. Known and experienced softball skills serve as the basis for learning these fundamental tennis skills with little stress on detail.

In this approach, the forehand and backhand drives and volleys are presented in terms of the basic softball skills of batting and bunting. Simple modifications from softball to tennis skills are taught as the students practice the techniques; explanations and details of performance are kept to a minimum.

Specific techniques which the students already will have experienced in softball include: a grip, stance with side to an oncoming object, a backswing in readiness for contact in batting, a "give" and punching type action in bunting, maintenance of a required distance from the moving object as contact is made, experience in meeting a moving object squarely, transfer of weight and a follow-through.

Though recent cinematographical research indicates that more advanced players do not begin preparation for stroking with the side to the net, the author believes that beginners develop a feeling for stroking rather than pushing the ball in a drive if initially instructed to learn with "side to the net." Also, thinking in terms of "side to the net" results in an approximate rather than in an exact right angle positioning stance to the net. As a student's skill increases, her

positioning will conform to that which will bring her the greatest success.

Procedures for Relating Tennis Skills to Known Softball Skills

For the drives, students are adequately spaced and are asked to choose a spot on the wall (if indoors) or on the fence (if outdoors) directly in front of them. They assume this spot to be the position of a pitcher. The student is instructed to pick up the racket and take a batting stance as she gets ready to bat the ball which she visualizes is about to be pitched. With both hands on the racket, as for batting, several practice swings are taken.

An adjustment is then made to achieve a longer reach. If the subject is right-handed, she drops the left hand; if left-handed, she drops the right hand and moves the hand which is now holding the racket nearer to the end of the grip. Practice swings involving a longer lever are made with the forehand grip, which has been achieved without introducing an entirely new skill. Individual corrections are made if students deviate from the correct grip, lead with the wrist, take too long a backswing or display an open or closed racket face.

Following practice swings with the dominant hand, students pretend to bat on the nondominant side. They proceed to choose a spot in front of them and practice swinging with both hands on the racket as though batting left-handed. A better reach is obtained when the top hand is removed, and since the remaining hand is near the end of the grip, it is necessary to make only a slight adjustment of position for the backhand grip.

Students should begin with a baseline game and learn to put the ball in play by means of a courtesy stroke as soon as possible. The courtesy stroke is done by dropping the ball in an imaginary batter's box, swinging and hitting it.

Coaching cues throughout the unit are in terms of softball techniques. "Bat right" for forehand and "bat left" for backhand are effective cues as the players rally, indicating to them early positioning with side to the net and racket back in preparation for the drive.

The volley is related to bunting with respect to positioning and to the fact that a backswing is largely absent, with greater emphasis on a punching action.

More exacting techniques can be accomplished after the students have learned the forehand and backhand drives and volleys as a whole concept in which the actions of stroking are related to a known sport skill. Greater expertise in performance can be achieved through more traditional coaching – when the students are ready.

Tennis Through Goal Setting

E. DAWN MCDONALD

E. Dawn McDonald is a graduate of Sargent College, Boston, Massachusetts, and received her master's degree from Southern Illinois University, Carbondale. She is currently an assistant professor and in charge of the tennis and badminton programs at Iowa State University, Ames. Dawn also has served as the Iowa DGWS tennis chairman.

The purpose of this article is to share some ideas for teaching a beginning tennis class. The term "beginning class" may mislead a new teacher into thinking that the abilities within this group will be quite similar. I have found that this is erroneous.

Classifying Students. The instructor can help herself by classifying her beginners, and this can be done with a simple racket drill before any instruction is given. The drill consists of hitting a tennis ball upward on alternate sides of the racket and counting the number of consecutive hits. When the student misses, she must start counting from zero. The length of the test is one minute and the student is instructed to remember the highest number of consecutive hits achieved within the minute. With a beginning class the instructor might like to give the students a second opportunity. With a class of 32 students it is easy to divide the class into four levels based on the scores from this simple test.

The class can be divided into four groups and students' names placed on index cards with information about their group and ability. This is the first information that will help the instructor in individualizing the instruction. It is now up to the instructor to make these groups function maximally. Students should be told that they will be working in their particular group for a period of time. It may be helpful to assign names or letters to the groups to facilitate court assignments later.

Within a week of daily class meetings, the instructor should teach the basics of the forehand, backhand and volley to the class as a whole. Key points should be emphasized to the students before assigning them to their courts. It should be explained that on some days each student will not receive individual assistance on the court.

Teaching Aids. Very early, the instructor should introduce all the available teaching aids, show their use and emphasize the potential help available with these aids. A ball-throwing machine, rebound net, stroke developers and suspended serving balls are the aids used. The proper use of this instructional area can be shown to the total class

in a relatively short period of time. Thus when a group rotates to this area, the students may begin work immediately on their strokes. It is helpful to the students for the instructor or an assistant to be available in this area, at least on the first day.

Group Goals. A group of eight students gives enough variety in personalities and skill to keep the students happy and still allows the instructor sufficient latitude to set goals for the four groups. Setting goals will vary from class to class, but with experience the instructor will be able to come up with realistic goals. For example, the top group may be able to rally a forehand for 10 consecutive hits quite easily, while the lowest group would be frustrated. So, the instructor would set the low group goal at four. She may keep changing the goals as skill improves, and should note each group's goals on the index cards. What the instructor uses for goals is only as limited as her imagination.

Group Rotation. The instructor should have a plan of rotation for the groups to help the students learn varying court conditions and locations. For example, some courts may be sheltered from the wind and others may be hit quite hard by the wind. If students are not rotated, they will not have the opportunity to play in various conditions. This learning may seem incidental, but it does show the student the need for control in tennis. The rotation that is used will be particular for the situation, but it is important that some system be used. Students should not be denied the learning that can happen almost automatically. All students should have an equal time on the courts with instructional aids. These are the courts that they can come back to alone to try to improve their game.

After this, the instructor may choose to give more help to the lower level students on the instructional courts. When this is done, goals for the other three groups should be set. There should be a goal for each group, every day.

The Lob

PATRICIA ANN SHERMAN

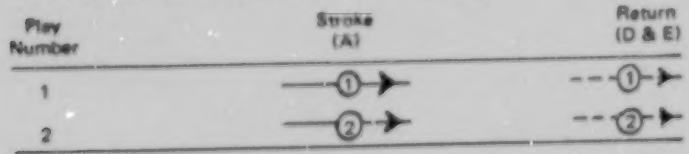
Since 1958 Patricia Sherman has been active in tennis as a competitor, teacher and coach. Her experience includes teaching in city recreation programs, private tennis camps, high school programs, workshops and at the college level. She was ranked second in the Northwestern Section of the USLTA for the 1968 playing season. She received her B.S. degree from Winona State College, Winona, Minnesota, and her M.A. and Ph.D. degrees from the University of Iowa, Iowa City. She is an assistant professor in the physical education department and women's tennis coach at the University of Wisconsin, River Falls.

The lob is one of the most valuable shots in tennis. Its effectiveness is based on its being used wisely at unexpected moments. Three types of lobs used in match play are the slice lob, the flat lob and the top spin lob.

Both the slice and the flat lob could be used in a defensive role. These lobs are hit at least 20 feet into the air and deep into the opponent's court in order to allow the player executing the lob time to regain the proper court position and to discourage the opponent from smashing the ball before it bounces. The slice lob has an advantage over the other two lobs because its flight is slow and its bounce is more difficult for the opponent to judge and handle.

The top spin lob plays an offensive role in match play; it should be hit high enough to clear the opponent's racket and land within four feet of the baseline. This lob can often result in an outright winning placement if the opponent is playing close to the net expecting a low hard drive. The effectiveness of this lob lies in its deception.

Diagrams follow to show the lob placement and practice patterns for the lob and smash. The key for the diagrams is:



"A" Attacking player

"D" & "E" Defensive players

▲ Bounce of the ball

Movement pattern of the player
The number indicates the movement for each play

Figure 1. Key to diagrams

Any type of lob which is hit from the baseline should have the apex of its trajectory directly above the net. The ball will then fall within the desired area of the court near the baseline (Figure 2). A lob hit from the baseline with the apex of trajectory above the opponent will result in a lob which lands out of bounds (Figure 3).

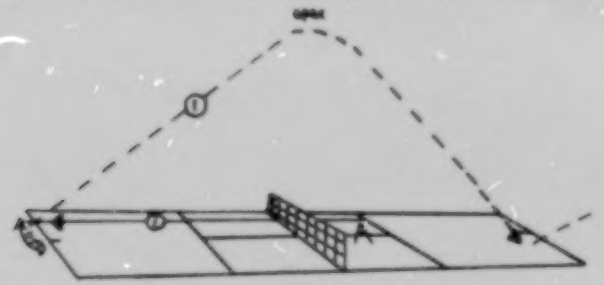


Figure 2. Correct placement of lob which has been hit from baseline.

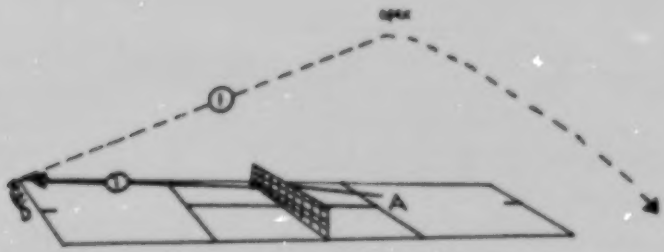


Figure 3. Incorrect placement of lob which has been hit from baseline.

A lob hit from the service line should have its apex directly above the opponent's court (Figure 4).

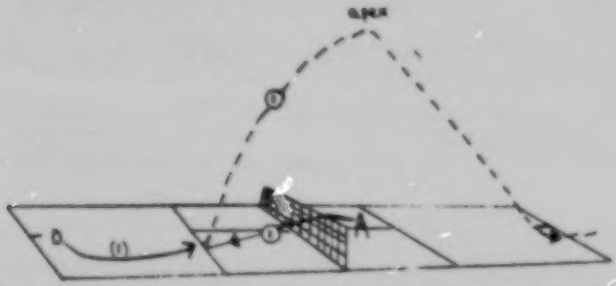


Figure 4. Correct placement of lob which has been hit from service line.

Qualities of a Good Lob

1. The footwork, stance and hitting position are the same for the lob as for the drive.
2. The backswing is shortened slightly and begins at a position below the ball.
3. The racket face is opened slightly just before contact in order to raise the ball high enough to clear the net player's outstretched racket.
4. The follow-through is long and in an upward direction. The player should attempt to have the ball remain in contact with the strings of the racket for as long as possible.
5. The key to the effectiveness of the lob is deception. The player should open the face of the racket at the last moment. The lob should be used when it is least expected.
6. The lob should be hit deep and high if its use is to regain proper court position. The lob should be hit a few feet above the outstretched net player's racket when attempting to pass the net player.
7. The lob should be placed on a diagonal or cross-court to make use of the greatest court area.

Uses of the Lob

The lob can be used to regain proper court position, to tire the opponent, and to change the pace. It can be used against an opponent who plays too close to the net as well as against a net rusher.

To Regain Proper Court Position

When a player is pulled out of position and time is needed to regain the proper court position, she should send up a 20-foot slice or flat lob to gain the extra time. If the lob is hit with good height and depth, a player forces the opponent to break the initial pattern and to initiate a new offensive pattern.

To Tire the Opponent

When returning a lob, a player must do a great deal of running in order to move into the proper hitting position. The lob will carry far out of the court after the bounce and the opponent must move with it unless she chooses to hit the ball on the rise or take it as a volley. The opponent also must apply her own speed to the ball. The most effective way to tire the opponent is to combine the lob with a drop shot.

To Change the Pace

When playing an opponent who likes to hit hard and with a definite rhythm, a player should lob to throw the opponent's timing off. This will also force the opponent to place speed on the ball and will reduce the possible angles of her return. The lob can also be used effectively if the opponent has difficulty hitting a high deep backhand, which is generally the most difficult stroke in tennis.

Against an Opponent Who Plays Close to the Net

An opponent who is playing close to the net can return drives with sharp angled placements. To keep the net player in an "honest" position, a back court player can hit a lob occasionally until the net player tends to drop back into a deeper position. At this time, once again a top spin drive can be hit to force the net player to volley upward or to make an error. Only at this time can the drive be effective. The lob can also be effective against a net player when a back court player is drawn up near the service line

Against a Net Rusher

The player should lob occasionally to keep the net rusher from crowding the net and gaining the advantage of the short angled shot from a drive return. The back court player should force the net player to play back slightly until once again the drive can be effective. The back court player should use the lob frequently against a net player who has a poor overhead.

The Lob Drill Progression

A drill progression has been established for the lob including both backboard and court drills which may be used alone or in groups of two or three.

Lob and Smash Backboard Drills

1. *Lob Above the 12-Foot Line – Smash Return into Target.* This is an excellent drill which can be used when a player is working alone in order to develop good timing on the smash. The lob can be hit at any height and depth to develop timing for the smash against all types of lobs.

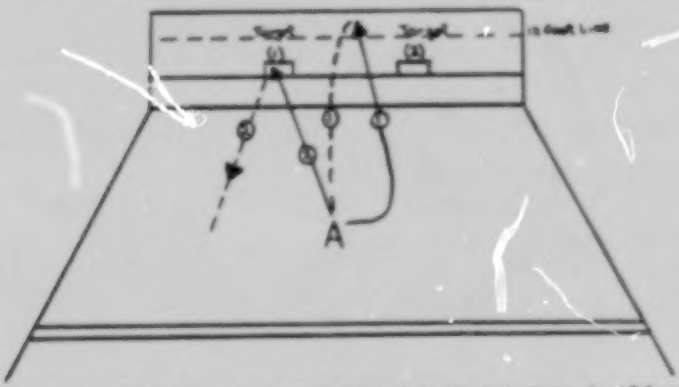


Figure 5. Backboard pattern for the lob and smash. Lob above the 12-foot line, smash the return into Target (1) or (2).

2. *Combine a Lob, Smash and Volley.* The player should begin by volleying within six to eight feet of the backboard. She should hit a soft volley which will bound upon the return from the backboard. Then she should hit a lob to the backboard, moving back and returning the lob with a smash. The player is able to develop excellent footwork in moving into position for the smash from a net position.
3. *Hit Continuous Lobs Above the 12-Foot Line.* To develop the three types of lobs, a player should stand 20 feet from the backboard and hit continuous lobs against the backboard above

the 12-foot line. This pattern can be varied by alternating with drives and drop shots.

4. *Lob Deep, Let Ball Bounce, Return with Deep Lob or Drive.* This drill is good practice for returning a deep high lob. The player should begin close to the backboard, hitting a deep lob, retreating diagonally back behind the ball, and then returning the lob with either a deep lob or with a drive.

Lob and Smash Court Drills

1. *Lob and Smash.* One player is in the back court and one is in the center of the opposing court at the service line. The backcourt player lobs and the net player smashes deep to the center and to the outside corners.

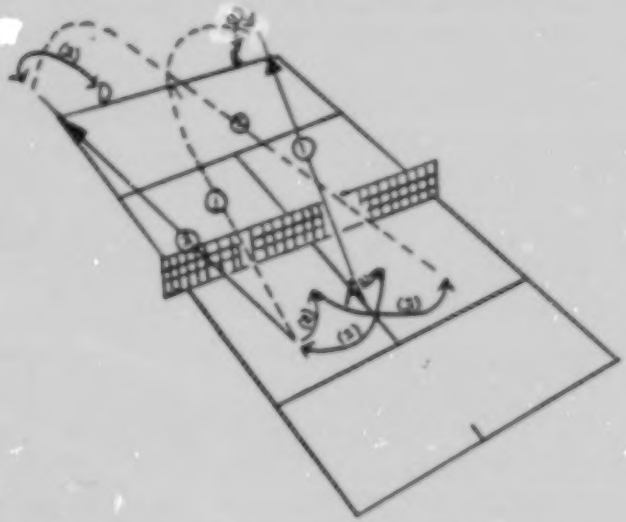


Figure 6. Court pattern for the lob and smash. Two on One – Two lob – one smashes to alternate corners.

2. *Two on One – Two Lob – One Smashes to Alternate corners.* Players D and E are located just behind the baseline and player A is located on the service line of the opposite court.

Players D and E continually lob and player A smashes to alternate corners. This is an excellent drill for getting into proper position to return the lob and for working on placement of the smash. Proper positioning should be stressed for the smash by having the player move on a diagonal toward the ball. The player should move quickly into good position and contact the ball in front of the body. The smash should be hit with depth and accuracy.

3. *Two on One – Two Lob or Drive – One Volleys or Smashes.* This is the same as drill number 2 with a variation in the return. The player should hit the appropriate shot for the situation. The net player must be ready for either a lob or a drive and the opponent must be ready for either a smash or the volley.
4. *Lob from Backhand Corner to Backhand Corner.* Both players are stationed at the baseline. Both players should hit continuous lobs deep to the backhand corner while making use of the greatest court area. They should return to the center of the court behind the baseline following each return.
5. *Lob from Forehand Corner to Forehand Corner.* This is the same as drill number 4, except the lob is to the forehand corner.
6. *Lob Down-the-Line.* Continuous lobs should be hit from the forehand corner straight down-the-line to the backhand corner and from the backhand corner to the forehand corner. This can be used as a variation to the cross-court lob. The players should return to the center of the court behind the baseline following each return.
7. *Deep Lob – Return with Drive or Deep Lob.* One player is stationed at the net and one is in the back court behind the baseline. The back court player hits a deep lob over the net player's head. The net player moves diagonally behind the ball and returns with either a drive or a lob.

Principles of Tennis Conditioning

STEPHEN L. WILKINSON

Stephen Wilkinson did his graduate work at the University of Iowa, Iowa City, and also served as assistant tennis coach from 1966 to 1970. He is assistant professor of Eastern religions and tennis coach at Gustavus Adolphus College, St. Peter, Minnesota. He is a USPTA professional and in 1973 was the national indoor doubles champion and singles finalist.

Intensive physical conditioning is a key to good tennis. Three important principles should be remembered when planning a conditioning program. First, stress in concentrated form the same movements required in the tennis match. Since all movements involve a tennis racket and a tennis court, use them whenever feasible. Emphasize the gliding, the quick running backwards and the leaps for the overhead, the streaks for the sideline with the racket in position, the quick stops for low balls with the knees bent and the body under control. These exercises are much more useful than some of the conventional training methods such as jumping rope or running a mile.

Second, require sound tennis principles while the conditioning is done. Footwork, racket position, stroke mechanics, follow-through, shifting the weight, bending the knees, keeping the head stationary and the back erect are all very important. Very few players have the stamina to play a long match without resorting to lazy and ineffective habits at least occasionally. Some of the most costly ones are: overhitting when the points get too long, stretching toward the sidelines to reach a ball instead of moving the feet a couple more steps, bending at the waist instead of the knees, moving after the ball in erect position and waiting until the last moment to get down to it, running back to the middle of the court instead of gliding, dropping the racket head below the wrist for low balls instead of bending the knees. An intensive conditioning period is the best time to correct ineffective tennis habits that often develop only after the player begins to get tired in that long three-setter. Within a few minutes of conditioning that tired condition can be reached. Then the more troublesome problems can be identified and corrected.

Third, instill confidence, concentration and "second effort" through conditioning. Players must know that they can hit all day if that is necessary to win. They are confident that they can reach any tennis ball, no matter where it is. They have the endurance to keep concentrating and to keep pushing themselves. Their head and eyes

remain focused on the ball. No ball gets by them that could be reached with a second effort. Often players will rest too long between points when a more intensive pace would wear down the opponent. Instead of pressing for the opening, moving in on easy balls, picking off balls that are hanging above the net, many competitors will wait on their heels until the ball comes to them. Good conditioning gives the player the confidence that he can expend more energy in ending the point effectively.

Conditioning using these three principles can be incorporated into the team practice schedule in many different forms. Also, it can be done in almost any location, ranging from one section of a gymnasium to a full battery of outdoor tennis courts. It may be used at the beginning of the season when no other activity is feasible, or it may be effectively integrated into the regular practice schedule all the way until the end of the season. There is no point in the season where one can afford to forget about conditioning. Players do *not* remain in top shape simply by playing. A conditioning routine which is more intensive than match conditions is necessary for maximum improvement.

Many routines are possible. A ball machine that will throw 50 balls into the same spot offers infinite possibilities when the player is required to run to the other side of the court and back between hits. Or collect 10 balls and force the player to scamper all over the court, hitting one ball after the next in immediate succession. As soon as the player has caught his breath, do the same with another batch of 10 balls. Or do the conditioning without the balls in a section of a gym or tennis court, keeping the racket in the player's hands and forcing him to execute simulated shots with the same precision and care that one would expect in a tournament match.

The variations of exercise routines are unlimited. The only prerequisites are imagination, knowledge of tennis movements and skills – and a slightly sadistic nature!

Begin Practice Rallies with a Serve*

DONALD D. KLOTZ

Donald Klotz is a retired associate professor and tennis coach in the physical education department at the University of Iowa, Iowa City. He has spent 25 years teaching physical education and recreation majors and coaching the tennis team at the University. He has also done 27 years of advisory work on tennis courts, programs and clinics. He developed the "Volley Method of Teaching Tennis" and has a patent on a clay-type tennis court. He has authored more than 50 articles on various phases of tennis. He received his B.S. degree from the University of Northern Iowa, Cedar Falls, and his M.A. and Ph.D. degrees at the University of Iowa.

Probably the oldest maxim in sports is "practice as you expect to play in competition." Practice patterns should be carefully planned to develop in the player conditioned reflexes on which she can depend in match play. On this basis traditional practice methods leave much to be desired. Generally, at least 85 percent of practice time is spent on baseline rallying. Good ground strokes are necessary, but do they merit that much attention? And can anyone spend that much time profitably on any one stroke? After an optimum period of practice the player will almost certainly become careless and break down most of the desirable mechanics achieved in the early part of her practice period.

Intensive charting of tennis matches shows that the total number of strokes per point seldom averages more than four. In the televised matches in the past season the average was approximately 3.2. The first stroke in a rally will be a serve, the second stroke a return of service, and the third stroke will depend on whether the server goes to the net or remains on the baseline. If she goes to the net the third stroke will be a volley or half-volley and the fourth stroke a passing shot or a lob. If she stays at the baseline the third and fourth stroke will likely be ground strokes. At any rate at least 50 percent of all the strokes used in match play will be serves and returns of service! The implication for the design of our practice patterns is obvious! Traditional practice systems are sadly inadequate to contend with the stroke situations to be faced in match play.

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*This article appeared originally in *World Tennis* magazine.

Is not the return of service a ground stroke? Indeed it is, but the ball comes with various spins and speed not encountered in ordinary rallying. Further, a receiver should learn to block, chip and shorten her swing to adequately contend with some types of service. A full swing will be totally inadequate for some types of service which the receiver must face.

Passing shots are ground strokes, also, but the mechanical and psychological situations are considerably different from the usual baseline rallying. If the server comes to the net the receiver is faced with a return of service and a passing shot all in one, a murderous challenge to a person accustomed to the rather leisurely rallying from the baseline.

After a great deal of experimentation the author believes that the only practical way to learn to serve and return service is to begin practice rallies with a serve. Here are some guiding points for implementing this practice play:

1. Either player may begin the rally with a serve rather than hitting the ball out of the hand. Overcome the idea that one of the players does all the serving for a time and the other one does all the receiving. The person with a ball begins the rally, just as you do with hitting the ball out of the hand.

2. Serve from *anywhere* along the baseline. Do not necessarily go to a fixed spot as you do in match play. Get the ball in play as quickly as possible.

3. Indicate to your opponent to which point you intend to serve, i.e., outside corner, inside corner, or straight at her. In practice we are not trying to ace anyone but merely to put the ball in play toward one of the three targets for which we will be aiming in competition. We *want* the opponent to have a good opportunity to return the service. Generally, select a target which will be convenient to her present position. If she happens to be in the center of the court at the baseline aim for one of the inside corners. If she is near the alley try for the outside corner. If she is in a normal receiving position aim straight at her.

4. Attempt to return all serves whether they are in or out. A long serve is just as good for practice in returning service as a legal serve.

5. Do *not* make endless serves into the net! These do no one any good. If the serve is going into the net the toss should be placed farther back.

6. Hit the return of service directly back to the server or at least indicate where you intend to hit it so that she can continue the rally. This type of practice demands more teamwork than competition.

7. Continue the rally after the return of service just as you would normally do.

8. The receiver can be helpful to the server in her attempts to gain skill in serving to the three targets in each court by taking a convenient position at the end of each rally or after retrieving balls. For instance, if she is near the alley, stay there to give the server a chance to aim for the outside corner.

Beginning the rally with a serve will take a little more time than hitting the ball out of the hand. However, when you consider that no skill is required to hit the ball out of the hand and not much more skill to return that first ball then very little time is lost in starting the rally with a serve.

As one would logically expect, the quality of service and return of service will improve dramatically, especially the latter. As the receiver's confidence picks up, she should step inside the baseline to receive, particularly the easier second serve. Go to meet the ball, hit it deep to the corners or straight back at the server's feet. Keep that return *deep!* Then go up to the net for an easy volley. *No player at any level of play should be allowed to get by with an easy second serve!* And they will not if the return of service is allotted the practice time it deserves. Likewise, the server will be able to place her serve with confidence and accuracy.

Comments and questions are invited. Write to Don Klotz, 60 Marietta, Iowa City, IA 52240.

Three Musts for a Tennis Team: Policy Sheet, Positioning Tournament, Ladder

VIRGINIA LOHMILLER

Virginia Lohmiller received her B.A. degree from the State University of Montana, Missoula, and her M.A. degree from Teachers College, Columbia University, New York. She has taught and coached tennis for many years and has served as Iowa DGWS tennis chairman and Southeast Iowa lifetime sports clinician.

As in all other phases of our highly mechanized society, even a tennis team can have processes which steer the group automatically. These pilot a team objectively, make it quite self-functional and motivate its members. Included in the system are a policy sheet, a positioning tournament and a ladder.

The Policy Sheet

All organizations or programs must be well structured to maintain orderliness and achieve success. Policies are necessary to orient those involved and to let them know their obligations. Tennis team management becomes effective through guidelines issued to players at the beginning of a season.

The following points could be included:

1. Constituency of the squad and the positions involved in varsity singles, doubles and reserve competition
2. Responsibility involved in representing a school through conference play
3. Requirements established by the local department of athletics and the state association: parent permission statement, medical examination, eligibility listing and insurance subscription
4. Scholarship requirements
5. Transportation arrangements and procedures for drivers
6. Time and place of practice sessions, schedules of matches and tournaments
7. Awards, honors or trophies, and relationship to a girl's recreation (or athletic) association
8. School regulation pertaining to absence of players during a part or a full day of a scheduled meet

9. Positioning tournament details
10. Tennis ladder regulations
11. Coach's philosophy and statements encouraging a player's tennis development.

These suggested points relate specifically to team and school circumstances and the content should be compiled accordingly. A policy sheet should be reviewed and evaluated at the close of every season.

The Positioning Tournament

Though time is involved for its completion, this positioning placement tournament has proved successful for many coaches. Frank McLeod, former ranked Australian player, and the author worked out the pattern of play, which is similar to a double elimination tournament yet unique in its pairings. This type of tournament provides the opportunity for continued play for early losers and affords a stringent test for the eventual winner. Seeding players from the preceding season strengthens the validity of this process. A regulation six-game set with a two-game advantage is used. In addition to the self-explained procedure, diagrammed at the end of this explanation, "A" winners and "B" losers can be criss-crossed when transferred to the second draw. This prevents playing an opponent a second time in an early round. When completed, there will be players mispositioned occasionally because of better than normal or inferior play during the tournament. These results are easily rectified as challenges are completed and the ladder "jells."

When more than 16 players are contending for limited openings on the squad, a preliminary elimination of some kind can easily be handled by using a shortened match, possibly a 32-point game, with the winner accumulating 17 points. In this method of scoring, each person serves four points, two trials each, changing sides after every eight points. The single point scoring system simplifies the game, encourages early strategy and eliminates long deuce-advantage games. An effective way to position doubles teams is through a round-robin event requiring this 32-point game for each match.

Once the positioning tournament has placed participants, challenges will further determine changes in lineup for competition. If players compete according to their ladder positioning, it becomes a respected measure, a team standard. In the Quad-City Metropolitan Conference the top seven players compete in singles, the top five teams in doubles. The selection of doubles teams depends on close positioning on the ladder, workability of players and grade level. Until their tennis develops sufficiently, remaining players (reserves)

will receive constructive experience as they, too, are positioned for singles and doubles.

To avoid confusion in interpreting the progression of this tournament the following explanation will serve to clarify transfer of players and completion of draws. See Figure 1.

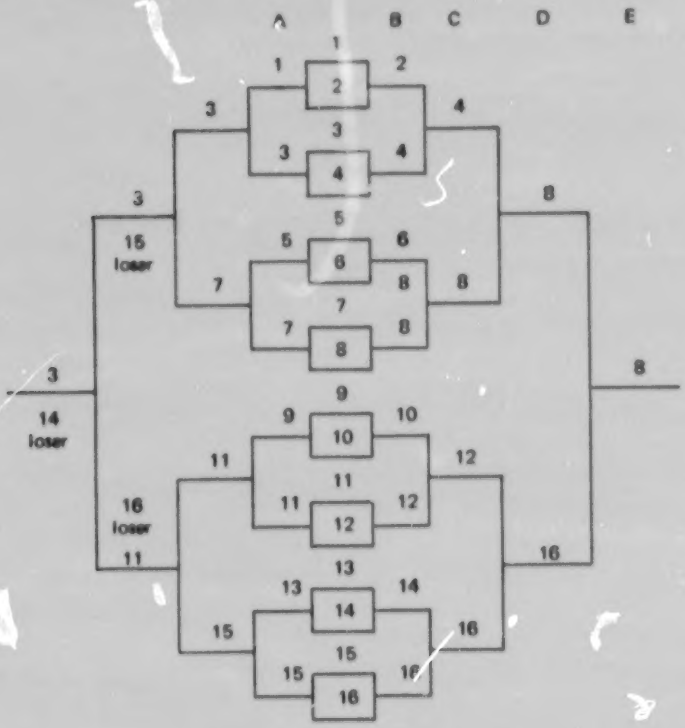

Figure 1. The positioning tournament – 1st draw.

In the initial lineup (16 players), losers of first matches move to the left, winners to the right. However, winners of bracket A are aligned with losers of bracket B in the second draw. Losers of

bracket A move to the left and play an elimination among themselves for positions 13 through 16. As diagrammed, player 3 wins her next two matches, thus assuming position 13. Her losing opponent, player 11, becomes 14 and players 7 and 15 who have lost in this elimination process play for positions 15 and 16 respectively.

In the second draw (Figure 2), player 1, who defeated player 3 in the A bracket, is now paired with player 6, who lost against player 8 in the B bracket; thus there is a crisscross pairing to prevent repetition in opponents. Likewise player 5, winner over player 7 in A bracket, competes against player 2, loser against player 4 in B bracket. We then group players 9 and 14 for competition as well as players 13 and 10. In this second draw losers 6, 2, 14 and 13 play in an elimination procedure for positions 9 through 12. Player 14, winning both matches, is position 9, player 6 is position 10, and player 2 defeats player 13, determining positions 11 and 12. The losers of F bracket, players 1 and 9, play off for positions 7 and 8. Player 9, the winner, becomes number 7.

In the third draw (Figure 2, page 33), F winners 5 and 10 meet C losers 4 and 12. In this competition players 5 and 10 lose and continue play for positions 5 and 6. Player 12, defeated by 4, is position 4.

And thus the long test nears completion with G winner, player 4, meeting D loser, player 16, who is defeated and takes position 3. A final match is held between H winner, player 4, and E winner, player 8, who defeats player 4 to take the coveted number 1 position.

The original 16 players are now positioned as follows:

Position	Player's Number	Position	Player's Number
1	8	9	14
2	4	10	6
3	16	11	2
4	12	12	13
5	10	13	3
6	5	14	11
7	9	15	7
8	1	16	15

The Ladder

In addition to its importance as a standard, the tennis ladder affords limitless opportunities for development of the game and growth in competitive tactics. Less experienced players find real incentive as they climb and the steady members appreciate their affiliation with this important structure. Indeed, it is a motivating force when vying for a varsity spot.

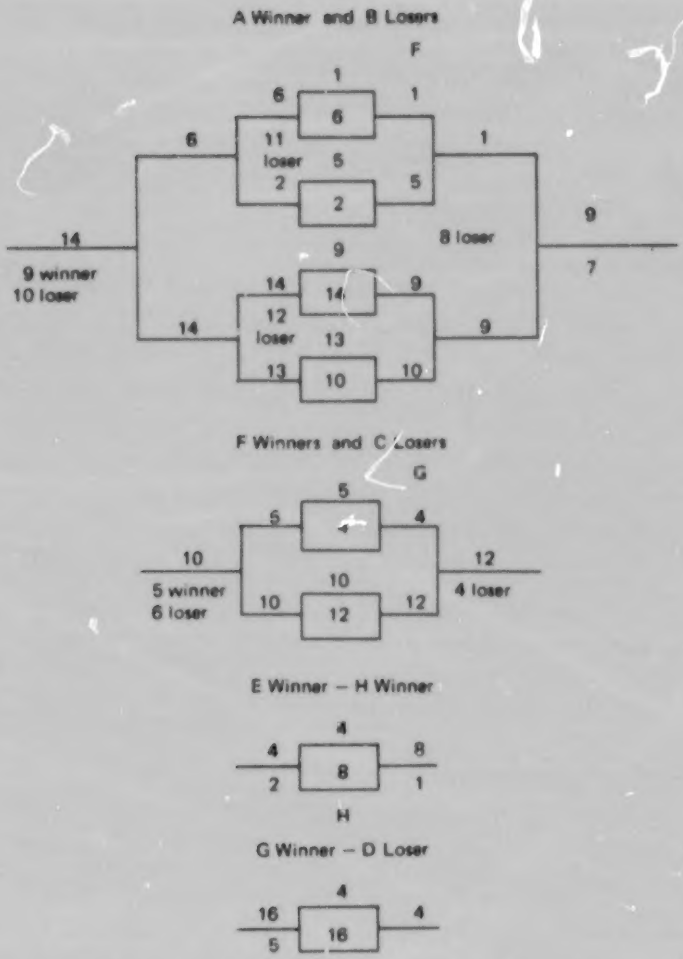

Figure 2. The positioning tournament – 2nd, 3rd, 4th, and 5th draws.

The ladder itself consists of any convenient size of plywood attractively painted and finished with small hooks properly spaced to hold tags. The latter, cut from poster board, contain the players' names and can be any desired shape with a hole punched at the top. As players' positions change, they are then readily exchanged. Notations can also be made on the back for convenience in checking permission, medical and eligibility factors or total challenges.

A ladder contains any number of players whom a coach feels she can supervise. Top members automatically form the competitive squad; lower members can be given organized practice when possible or work independently through challenges. Although the varsity squad has requirements for major and minor letters, other ladder players could receive an award for attending a percentage of practices and a required number of completed challenges per season.

The following ladder rules are effective:

1. The challenge sheet contains the following headings: date of challenge, name of person being challenged, score results. After understanding the rules, place your challenge accordingly.
2. No one can rechallenge the same player on the same day of a completed match. A new challenge must be placed a day later.
3. No one can be challenged a third time consecutively by the same player.
4. No position can have more than one challenge set in advance.
5. All challenges must be completed within three days. A challenge match not played within three days must be rescheduled and redated at the end of those already posted.
6. All challenges consist of a regulation set.
7. Between positions 1 and 10, a player may challenge no higher than two places above her position. Between 11 and 20 inclusive a person may challenge no more than 3 above. In this arrangement, position 12 may challenge position 9; position 11 may challenge position 8. All positions below 20 may challenge through 18, 19 or 20.
8. A defeat in a challenge results in an exchange of positions. Any varsity squad member challenged and defeated by a girl below position 16 must realize this is a replacement in squad membership unless arranged on a probationary period basis by the coach.
9. Only the most honorable sportsmanship and responsibility are expected in ladder challenges.

A policy sheet, the positioning tournament and an active ladder will contribute much to your tennis program. When enthusiastically emphasized by the coach, they will stimulate every phase of the game and promote fine participation.

Early Season Conditioning Drills

STEPHEN L. WILKINSON*

Even if the snow has not melted and no indoor tennis courts are available, it still may be the time for the tennis season to begin. Start with a conditioning program that emphasizes court movements, sound tennis mechanics, determination and concentration. Even if 20 people are forced into one section of the gym, much can be done to prepare the players for the coming season.

Running Drills

The following exercises require a space 35 feet long and a few feet wide. A corridor could be used, if necessary. By using lines, separating the players by a few feet, and having them move in the same direction at the same time, one can fit a large number of people into a small space. For lateral movements each player needs to move 13.5 feet in one direction (the distance between the middle of the court and the sideline), back to the same spot, and 13.5 feet in the opposite direction. For up and back movements about 35 feet (distance between the baseline and the volley position at the net) is desirable. The players should be worked at full speed for one minute, given a 45-second rest and then worked again for a minute. This pattern should continue for a period of 15 minutes which includes 9 minutes of hard running. The movements in these two directions as well as diagonals can be included within the same minute or one direction can be emphasized for the entire minute, but a variation in the routine is desirable after each minute. Even the 15-minute sequence must fit into a total conditioning program that will vary according to the level of the players and the desires of the coach.

Movement Mechanics

In the remainder of this article, attention will be focused on some principles of tennis that need to be emphasized while the conditioning is in progress. The variations of movement patterns which are possible will not be outlined. Most coaches can figure this out after watching a few good tennis matches. Nor will anything be stated about concentration, determination and second effort. The players must force themselves to view this exercise as authentic tennis. If

*See page 24 for brief biographical sketch.

they do not keep their eyes glued on an imaginary ball across the imaginary net, then they are not going to meet the ball. If they do not hustle to the imaginary ball with every ounce of speed they have, then they are losing crucial points. If they do not execute the simulated shot with precision, balance and care, then they are hitting poor shots. Most coaches should be able to offer the discipline and direction that is needed in the areas of concentration-determination and movement patterns. But suggestions are necessary in the area of tennis mechanics. The following ideas are only a few of the more important ones which should not be overlooked.

There are a number of suggestions which apply to all lateral movements toward the sidelines. First, make certain that the player transfers her weight toward the net as the ball is hit. One common error which restricts weight transfer is a front knee that points toward the sideline; make certain that the bending front knee points in the general direction of the shot. Second, require the players to *glide* facing the net, not run, as they regain position in the middle of the imaginary court. Thereby they are able to change direction much easier should the ball be hit to the place from which they came. Once the location of the next shot is determined, however, the movement should be a running one. Third, require your players to move for low balls with the knees bent. The back and head should be kept erect while the knees lower the waist to ball level. This bending should be done before the ball is hit, not during the shot. Therefore it is often necessary to have one's knees bent while running. Encourage your players to simulate low shots. Running with the knees bent is more demanding, but it will make shot execution more effective. Fourth, check to see that the racket and arm are being extended on the follow-through in the direction the ball is supposed to go. Finally, make certain that the wrist remains firmly locked at all times. One of the greatest causes of inaccuracy is a floppy wrist.

When forehands and backhands are being practiced, one more reminder needs to be added. The player should get the racket back as soon as she knows where the ball is going and run with the racket back. Then she will be set to hit no matter how late she gets to the ball. This is extremely important and should be emphasized strongly in these drills.

It is another story when the volleys are practiced. In this case the racket must be kept in front of the player, between her and the imaginary net. There is a direct relationship between effective volleying and meeting the ball well out in front toward the net. As one runs toward the forehand sideline, it is natural to keep the arm and racket on the baseline side of the body, but this is a mistake which often leads to volleying on the baseline side of the body, a

situation which should be avoided. There is never a backswing on the volley. The arm and racket always need to be kept on the net side of the body, where the eyes can follow the flight of the ball into the racket and the ball can be met with a punch, not a swing.

Finally, a couple of points of instruction are necessary for directing an "up and back" drill where a volley is simulated near the imaginary net and an overhead near the imaginary baseline. When moving towards the baseline, the player should run directly backwards. During the last few steps the body is rotated sideways, the racket is drawn back, and both arms are raised for the imaginary overhead. The right-handed player plants the right foot and uses it as the base for the transfer of weight. As the overhead is hit, the movement back toward the net begins.

These are only a few suggestions. Use the concepts and reminders which have been suggested here to build an exciting early season program that will advance your players before they are able to get on the court, or even hit a ball. Keep a tennis racket in their hand at all times during these drills. You will be pleased with their progress when they first set foot on the court.

Simulated Drills for the Tennis Coach

ANN VALENTINE

Ann Valentine has been active as a competitor, an instructor for private tennis camps, workshops and professional tennis classes, and a coach at the collegiate level. She received her M.S. degree from Pennsylvania State University, University Park. She is currently an assistant professor of physical education and tennis coach at Brigham Young University, Provo, Utah.

Regardless of the type of drill you give an advanced class or tennis team to practice, you should stop and think about one factor – how realistic is this drill? Is there a reason for practicing it as it is, or should you change it to resemble as closely as possible the situation that occurs in a real game?

There is a definite value in beginning with stationary drills such as cross-court forehand (with the purpose being to groove the stroke as well as hit for depth), but the time soon comes when you must get the student moving by combining this stroke with others to resemble closely a game situation. When planning your practice session you should first determine the goal you wish to attain and then select a drill or series of drills that will most nearly simulate a game situation. Many balls must be used so that valuable time is not wasted in "shagging."

Here are a few drills that have proved to be stimulating for tennis teams and well worth their practice time. They may need to be adapted to fit your specific situation, with consideration given the abilities of the students and the goals you wish to attain.

1. Serve-Volley-Smash Drill (2 servers S1 and S2, and 2 receivers R1 and R2)

Objective: For the server to practice the serve, net approach, volley and smash while moving to cover the angle of return on all shots.

Player S1 serves. If the serve is not good she moves out and S2 serves. If the serve is legal S1 follows her serve in to the service line,

where R1 returns the serve. S1 continues to volley and smash every return that R1 and R2 set up to her until she misses a shot. S2 then repeats the same drill. Please note: the two receivers should each have three balls. Should either of them miss a return she immediately drops another ball and returns it so the server gets a lot of practice in positioning for the correct angle of return. The players should rotate courts and placement from inside corner on serve to outside corner, etc.

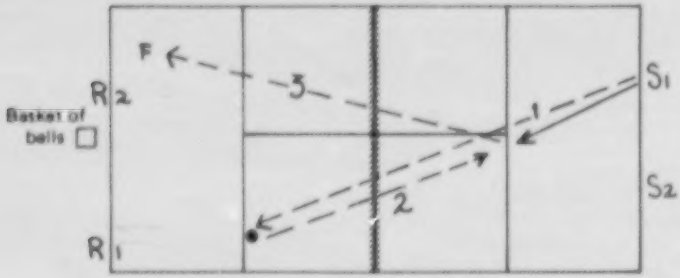

Figure 1. Serve-volley-smash drill.

— → Path of ball
——→ Path of player
Numbers indicate sequence of strokes

2. Cross-Court Doubles Drill (2 servers S1 and S2, and 2 receivers R1 and R2)

Objective: For the server and receiver to practice cross-court shots after a serve, net approach, volley, lob and smash. This helps to teach accuracy because the same drill is going on in the other half of the court.

The above drill can be adapted for a doubles cross-court drill by having S1 serve from the right court and rush the net while S2 serves from the left court and rushes the net at the same time. All players must hit everything cross-court and accurately or the situation could become a little dangerous.

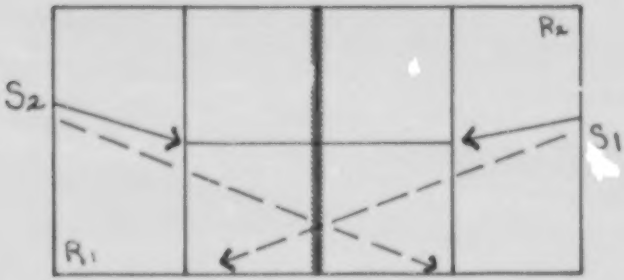

Figure 2. Cross-court doubles drill.

- - - → Path of ball
——→ Path of player

3. Scramble Drill (3 players, 2 hitters and 1 retriever, and a basket of balls)

Objective: For a player to maintain some endurance and at the same time acquire some hitting accuracy while scrambling to hit deep forehands, backhands, volleys, smashes, drop shots and lobs.

Player A takes a position behind baseline. The instructor stands across net at service line with basket of balls. The instructor starts by hitting balls wide to the forehand and backhand corners and occasionally a short one to the player's service line. Player A must run up and either hit a deep down-the-line return or a drop shot to the corner of the net. The instructor continues to hit the wide volleys, half volleys and overheads to Player A, then tries to get her away from the net by hitting a deep lob to her backhand corner, then forces her in again with a short shot, etc., until the player cannot run any longer. This is a good endurance drill.

4. Cross-Court-Down the Line Drill (2 players)

Objective: To practice hitting down-the-line and cross-courts while on the run for depth as well as accuracy.

The instructor should have the players stand about three feet behind the baseline. While rallying, one player hits every ball cross-court; the other player hits every ball down the line. Their positions are then reversed. The instructor should be sure all strokes

are hit on the first bounce and between the service line and baseline corners.

5. Court Coverage Drill (2 players, 1 retriever)

Objective: To practice hitting ground strokes down the line and an approach shot or deep shot.

Three running ground strokes should be hit, and on the fourth ball an approach shot or drop shot should be left. The player should try to hit each shot down the line. The player should take her ready position behind the baseline. The instructor should hit to the player from the opposite side of the net. The instructor should hit the first ball deep to the forehand court, second ball deep to the backhand court, third ball to the forehand court and the fourth ball to the service line. The player should aim for deep drives that land about three feet from the baseline (preferably in the corners). This drill is not effective unless the instructor has a "fast-fire" attitude, hitting the ball with good pace and wide enough so that the player must strain to attain position. Repeat the drill five more times.

6. Overhead Drill (2 players, 1 retriever)*

Objective: To practice returning a high bouncing baseline lob with an overhead stroke and an approach forehand and backhand volley.

Player A stands a foot behind the baseline. The instructor on the other side of the net hits Player A a deep, high lob which bounces about two feet from the baseline. Player A lets the ball bounce and then hits it like an overhead. After hitting the overhead, Player A runs toward the net and hits a forehand volley and then a backhand volley; Player A runs off the court immediately so that Player B can start the drill. Repeat the drill 6 more times per player.

7. Seven's Drill (2 players, 1 retriever)*

Objective: To work on endurance and positioning for backhand volley, overhead smash, half volley, forehand and backhand drop shot.

The player serves the ball to the right service court. The instructor is standing in the forehand court as though waiting to

*Drills 6 and 7 were submitted by Peggy Michel.

return serve. The player follows the serve to the net. When the player reaches the service line, the instructor hits a ball to the player's right side (if the player is right-handed). The player moves over and hits a forehand volley down the line. The second ball is hit to the player's left side so that the player moves over and hits a backhand volley. The third ball is hit over the player's head so that she must run back and let the ball bounce, and hit an overhead smash. The instructor should make sure that the shot over the player's head hits about three feet from the baseline. After the player hits the overhead smash, the player runs toward the net; half way between the baseline and the service court she hits a half-volley. After hitting the half-volley, the player moves closer towards the net and hits a forehand drop shot and then a backhand drop shot. Repeat the drill four more times.

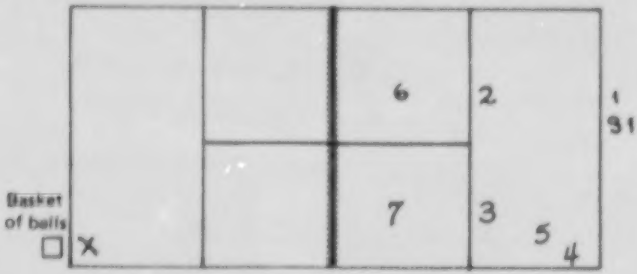

Figure 3. Seven's drill.

X = instructor

Key to the type of stroke that should be hit from various positions:

1. serve
2. forehand volley
3. backhand volley
4. overhead smash
5. half-volley
6. forehand drop
7. backhand drop

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Backhand Stroke (#2761)	*Backhand Stroke* (#2769)
Backhand Variations (#2762)	*Backhand Variations* (#2770)
Volley (#2763)	*Volley* (#2771)
Basic Serve (#2764)	*Basic Serve* (#2772)
Flat Serve–American (#2765)	*Flat Serve–American Twist* (#2773)
Twist Serve	
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Note: USLTA publishes a *Comprehensive Tennis Film List* which is updated annually. For a copy, send $1 to USLTA Education and Research Center, 71 University Place, Princeton, NJ 08540.

USLTA Women's National Collegiate Tennis Championships

Eligibility requirements for the Women's National Collegiate Championships and all Sectional Championships shall be as follows: (exception Point 5)

1. Any woman student who is presently enrolled as a full-time undergraduate student in a university, college, or junior college, and is approved by her college as meeting its academic requirements, shall be eligible. An undergraduate student is defined as one who has not received the B.A. degree or its equivalent.
2. A student may participate in a tournament held during the summer provided she was enrolled for the semester or quarter preceding the tournament. (Exception: Seniors graduating any time during the school year prior to the tournament may participate.)
3. Transfer students are immediately eligible for participation following enrollment in the institution.
4. A student may participate no more than four times.
5. Entries shall be limited to four singles players and two doubles teams from each college. Players in doubles may or may not play singles. Exception: Sectional championships may determine their own regulations in regard to the number of entries in singles and doubles play.
6. All participants shall be of amateur standing as defined by the USLTA.
7. All participants in The Women's National Collegiate Championship and in all sectional championships shall be an individual member of the USLTA.
8. All participants shall be certified by the chairman of the Department of Physical Education for Women of their respective institutions.
9. The responsibility for the health status of students shall be assumed by the respective institutions.

Awards at the Tournament

The Treesh Bowl is given to the singles winner, and the Pat Yeomans Tray is presented to the doubles champions. A team trophy donated by Mrs. Catherine Sample is awarded to the winning college for one year. Mementos may be given to the team members by the host college. USLTA silver balls are awarded to the singles and doubles winners and USLTA silver medals to the runners-up.

The 1974 and 1975 tournaments will be held in June at the Kalamazoo College, Kalamazoo, Michigan. Starting in 1976, the tournament will rotate annually.

Information in regard to national collegiate tournament can be directed to Mrs. Peggy L. Mann, State University of New York at Albany, Physical Education Center 242, 1400 Washington Avenue, Albany, New York 12222.

TENNIS STUDY QUESTIONS
1974-1976

PART I

Directions

Indicate the umpire's decision in the following situations. There is only one best answer. A refers to the server and B refers to the receiver. Assume only those conditions which are stated.

SP – Server's point
RP – Receiver's point
F – Fault
L – Let
BCP – Ball continues in play

1. Player B's racket touches the net when volleying the ball.
2. Player A crosses an imaginary line in extension of the net before making a good return; Player B fails to return the ball.
3. The server volleys the ball before it has crossed to her side of the net.
4. During the first service, which is a fault, the server's racket flies out of her hand and hits the net before the ball hits the ground.
5. The player receiving the serve hits the ball before the ball bounces in the service court.
6. Player A's forehand drive touches the net post and hits the ground within the receiver's court.
7. A spectator walks across the back of the court as the receiver attempts to return a forehand drive. The ball lands in the net, as the player was forced to restrict the backswing to avoid hitting the spectator.
8. The score is 30-30. Player A serves the second ball. The umpire calls "play." The receiver hesitates, and attempts but fails to return the serve.
9. Player A serves the ball. B hits the ball but does not return it. B then claims he was not ready.
10. Player A serves from the wrong court. She loses the point and then remembers that she served from the wrong court. She requests that a let be played.
11. Player A's first service is long and is hit with such force that it rebounds from the backboard behind the court and distracts the receiver trying to return the second serve. The receiver requests a let.
12. Player A serves. The serve strikes a ball lying in the correct service court.

13. A and D are playing B and C. A serves to C. Then B leaves the court while the ball is in play.
14. A and D are playing B and C. A serves to C. C hits a forehand and the ball breaks.
15. Player A's second serve hits her partner at the net and drops into the correct service court. Player B misses.

PART II

Directions

Read the questions carefully. Select the one item which best answers the question.

16. Which of the following are required specifications of a doubles court?
    A. Baseline 27 feet long
    B. Service line 3 inches in width
    C. Posts 3 feet outside the doubles court
    D. None of these
17. Which statement concerning the net is correct?
    A. It stretches to within one foot of the post at each end.
    B. It is the same height from post to post.
    C. It is touching the ground its entire length.
    D. It is held down taut by a strap at each side line.
18. Which specification must a tennis racket have?
    A. 9 inches across the racket face
    B. 27 inches in length
    C. Balanced according to USLTA standard
    D. None of the above
19. When may a match be postponed?
    A. When a player is injured
    B. When a player becomes ill
    C. When weather conditions do not permit play to continue
    D. When a player fails to report in time for the match
20. What is the procedure when an official postpones a match?
    A. The previous score and the previous occupancy of courts shall hold unless the players and referee agree otherwise.
    B. The previous score and the previous occupancy of courts must hold.
    C. The interrupted set shall be replayed from the start.
    D. The match shall be replayed from the start.
21. In women's tennis, when does a rest period occur?
    A. Every odd game
    B. After the first set
    C. After the second set
    D. At no time

22. When may the serving order be changed in doubles?
    A. After both teams have served once
    B. At the start of any game in which the team is serving
    C. At the start of a new set
    D. Never during the match

23. The order of receiving the service is accidentally changed by the receivers. Which of the following statements is true?
    A. Partners resume their original order of receiving immediately.
    B. Partners resume their original order of receiving when it is their turn to receive again.
    C. The order remains altered until the end of the set in which the mistake is discovered.
    D. The order remains altered until the end of the match.

24. Which of the following is the sole privilege and duty of the umpire?
    A. She can overrule the decision of the linesman.
    B. She can remove a linesman.
    C. She should repeat the call of the linesman.
    D. She has the authority to postpone the match at any time.

25. In which situation should a foot fault be called?
    A. The server walks when delivering the serve.
    B. The server jumps off the ground when serving.
    C. Neither of the above
    D. Both of the above

26. A ball bounds back over the net, and the player concerned reaches over the net in order to play the ball. What is the ruling if the player is hindered from doing this by her opponent?
    A. The umpire may award the point to the player hindered.
    B. The point may be replayed.
    C. Either A or B may be the ruling.
    D. The umpire awards the point to the player hindered.

27. A ball hits the umpire or her chair. The player claims that the ball was going into the court. What is the decision?
    A. The umpire must call a let.
    B. The umpire may call a let.
    C. The player loses the point.
    D. An appeal is made to the referee.

28. On the second serve in a singles game played on a doubles court with doubles and singles net posts, the ball hits a singles post and then hits the ground within the lines of the correct service court. The receiver does not return the serve. What is the decision?

A. The umpire may call a let if server requests it.
B. The umpire must call a let.
C. The umpire awards a point to the server.
D. The umpire awards a point to the receiver.

29. A and D are playing B and C. A serves to C. C cannot see the serve, due to the position of D, and is unable to return the ball. What is the decision?
    A. Let, point replayed
    B. Let, D warned about position
    C. Point awarded to B and C
    D. Point awarded to A and D
30. A player's shoe becomes out of adjustment in such a way that it is impossible for the player to continue play. What is the decision?
    A. If the player leaves the court, a default shall be called.
    B. The player must continue until the end of the game under these circumstances.
    C. The player must continue until the end of the set under these circumstances.
    D. Umpire may suspend play if circumstances were not within the control of the player.

ANSWERS AND RULE REFERENCES

PART I

	Answers	Rule References
1.	SP	18-e
2.	SP	4, Case 1
3.	RP	18-f
4.	RP	18, Case 2
5.	SP	16-a
6.	BCP	22-a
7.	L	23, Case 1
8.	L	23
9.	SP	11
10.	RP	10, Case 1
11.	L	23, Case 6
12.	BCP	22, Case 3
13.	BCP	30, Explanation, Case 3
14.	L	6, Case 3
15.	RP	37

PART II

	Answers	Rule References
16.	C	1, Explanation
17.	C	1, Explanation
18.	D	Not specified by rules
19.	C	29, 30, explanation
20.	B	29
21.	C	30, explanation
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24.	C	Tech. Off., Calling the Match, #7
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29.	D	34, Explanation, Case 1
30.	D	30, Case 1

Inquiries concerning these study questions should be directed to the Tennis Examinations and Ratings Chairman:

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TECHNIQUES OF OFFICIATING TENNIS

TENNIS SUBCOMMITTEE
Principles and Techniques of Officiating Committee

DUTIES OF THE REFEREE

In the case of each tournament, the tournament committee elects the referee.

The referee shall –

1. Know and apply all the rules, being able to decide quickly and to take full responsibility for his actions.
2. Have the power to appoint a substitute and may not umpire a match unless a substitute referee has been appointed.
3. Have the power to appoint and remove umpires, net umpires, and linesmen, and to assign courts and to start matches.
4. Decide any point of law which an umpire may be unable to decide, or which may be referred to the referee on appeal from the decision of an umpire. Such a decision is final unless reversed by the USLTA Executive Committee.
5. Have the sole power to excuse a competitor from playing for a definite period.
6. Default a competitor who has not been excused and refuses to play when called upon to do so.
7. At his discretion, at any time, postpone the match because of darkness or conditions of the ground or weather.
8. Give approval to postponement of a match by the umpire or order immediate continuation of the match.
9. Decide if an unfinished match is to be entirely replayed, if the contestants are so agreed.
10. Be present or arrange for a substitute during all play.
11. Sit beside the court, alongside the umpire's chair, during play of the finals and other important matches.
12. Give approval to the umpire's decision that new balls are necessary.

Combination and digest of "USLTA Tournament Regulations" and "Instructions for Tournament Officials" reprinted by permission from the *Umpires' Manual*, published by U.S. Lawn Tennis Association, 51 E. 42nd St., New York, N.Y. 10017.

DUTIES OF THE UMPIRE

The umpire shall –

1. Have an exact knowledge of the Playing Rules, Tournament Regulations, and their proper enforcement, and be responsible for the proper conduct of the match.
2. Be on hand and ready when the match is called.
3. Concentrate on the match and follow it keenly.
4. Be sure the court is correct, measure the net at the center and at the posts, and adjust the net during play, if necessary.
5. Check that there is a full complement of chairs for linesmen placed opposite the various lines and not facing the sun (see diagram).

Note: Umpire's chair should be centered on the net about 5 feet from it with the seat not less than 5 feet from ground (preferably 7 feet).

6. Arrange for toss for choice of court and service.
7. Score the match and record points on a scorecard.
8. Call the score promptly and distinctly.
9. Direct the players to change courts in accordance with Rule 25.
10. Watch for and call any infraction of rules and stay with your decision if you feel it is correct.

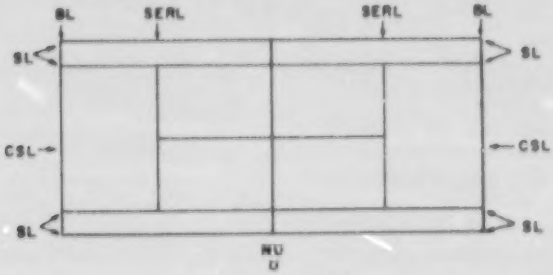


Diagram of Officials

BL—Base Linesman
SERL—Service Linesman
SL—Side Linesman
CSL—Center Service Linesman
U—Umpire seated on elevated stand
NU—Net Umpire seated by net post

11. Ensure that players serve from the proper court.
12. Ensure that players receive from the proper court.
13. Call service faults, lets, outs, and foot faults only if there are no linesmen or net umpire.

14. Call a let and replay the point in accordance with Rule 23.
15. If appealed to by a player during a rally, say nothing.
16. Decide all doubtful or disputed strokes subject to decision of the linesmen, and all points of law, subject to an appeal to the referee.
17. Decide when new balls are required, subject to approval of referee.
18. Uphold the decisions of linesmen and net umpire.
19. Order a point replayed when a linesman or net umpire corrects his decision if the call has affected the play of either side.
20. Decide, at times when a linesman or net umpire is unable to render a decision himself, or call a let and replay the point.
21. Announce the ten-minute intermission, noting time and name of player next to serve, and notify players three minutes before time is up. See that play is promptly resumed with all officials in place.
22. Suspend play due to circumstances not within the control of the players.
23. Postpone the match because of darkness or conditions of ground or weather, subject to approval of the referee.
24. Remove a linesman or net umpire for just cause, subject to final decision of the referee.
25. Do not let the gallery disturb the players. If it does, stop play and ask for cooperation of the spectators.
26. Sign the scorecard and deliver it to the proper authorities at the end of the match.

CALLING THE MATCH

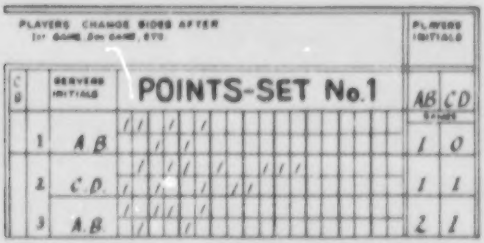
General Suggestions

1. Have a scorecard, two soft pencils with erasers, and a copy of the current DGWS Tennis-Badminton Guide.
2. Write the names of the competitors on the scorecard, and be sure of their correct pronunciation.
3. Be able to project your voice so it can be heard easily by gallery
4. Allow the players not more than three minutes for warm-up.
5. After the warm-up announce: "This match is between Miss Jones and Miss Smith. Miss Jones serving. Linesmen ready? Play."
6. Call the name of each player as she serves for the first time.
7. The umpire repeats all calls of linesmen and the net umpire.
8. When the service falls into net on first serve, do not call a fault.
9. Act as the connecting link between the match and gallery; keep your eyes on the ball in play and concentrate attention on the correct calling of score and conduct of the match.

10. After a point is finished, first mark the scorecard and then raise your head and announce the score loudly and distinctly. Make announcements sharp and clear with a brief pause after each syllable.
11. Hold the scorecard with the thumb of your left hand touching the line of the game being played.
12. Call the server's score first.
13. Call advantage by saying, "Advantage, Miss Smith."
14. Call games as follows: "Game, Miss Smith; games are four to two, Miss Jones leads, first set."
15. Call set as follows: "Game and second set, Miss Smith, seven-five; sets are one-all."
16. After the first set, announce the set score every three or four games.
17. In making announcements, the words to be emphasized are the names and the score.
18. At the finish of a match announce: "Game set, and match–Miss Smith; score 3-6, 12-10, 6-3." Always give the winner's score first.
19. Correct the score whenever you have called it incorrectly. Call "Correction. The score is 15-all."
20. Wait until the applause subsides before calling the score.
21. Call "not up" if a player fails to reach ball on first bounce. Call this immediately to prevent confustion rather than waiting to see whether or not the ball is returned.
22. Call "four stroke" or "stroke" when a player loses the point by playing improperly, such as by touching the net with her body, racket, or anything she wears or carries while the ball is in play, or if she volleys the ball before it has passed the net.
23. Call all lets if there is not net umpire – both on services and on situations where the point is to be replayed, according to the rules. In calling a service let, say: "Let, first service," or "Let, second service."
24. If there is not a full complement of linesmen, call faults and outs on lines you have agreed before the match to judge.

Note: The further side lines and two base lines are hardest for an umpire to judge, so when possible, linesmen should be assigned to these lines. The service lines are the next most difficult to judge. If there are no linesmen, players may agree to judge further side lines and base lines in their own court.

25. If there are no base linesmen, call foot faults which may be judged from the chair.
26. Never announce "match point," or "set point."



The Scorecard shows that in the first game the score ran and would have been called thus: "15-love, 30-love, 30-15, 40-15, 40-30, game (A.B.)." In the second game: "Love-15, 15-all, 15-30, 30-all, 40-30, deuce, advantage (C.D.), deuce," and so on. The score of the server should be called first.

TECHNIQUE OF SCORING

1. Record names of players in the proper space on the scorecard.
2. After the order of service is determined, initial the spaces alternately on the scoreboard for the entire set. In case of a long deuce game in which there are not enough squares in which to record the score, it is advisable to go into the next page on the right or on the back of the card, but never down the card where the next game goes.
3. Put players' initials at the top of extreme right-hand column.
4. The points are recorded by means of pencil marks in the spaces beneath the word Points, putting the server's points on the top line and the receiver's on the second line, as illustrated above.

DUTIES OF LINESMEN

A linesman is appointed by the referee and may be removed only by the referee.

The linesman shall –

1. Be on hand and ready when the match is called.
2. Not wear white or light clothes.
3. Be seated facing the line he watches and be alert and concentrate every instant the ball is in play.
4. Sit quietly during play and not leave without the permission of the umpire or until another linesman has been put in his place.
5. Try to get out of the player's way if he sees he will interfere with a stroke.

6. *Watch the line–not the ball.* Sense where the ball will bounce, and if necessary, change position to see it.
7. Remember: "A ball falling on a line is regarded as falling in the court bounded by the line." (Rule 20.)
8. Call his decision loudly and sharply and with conviction. Accompany his call with a motion of his arm in the direction that the ball lands out of the court, if applause may drown out the call.
9. Call decisions as quickly as is consistent with accuracy.
10. Never call "out" until the ball has actually struck the ground or fixture outside the court.
11. Call only "out" or "fault"–never "good."
12. Change his decision when he realizes he has made an error. He must immediately tell the umpire who decides whether or not the point shall be replayed.
13. Call it to the attention of the umpire if he calls a score at variance with the linesman's decision.
14. Make his decision as he sees the ball and stick to it. The players, umpire, and referee may never overrule the decision of a linesman on a question of fact.
15. Put his hands over his eyes if the player obstructs his view of the ball or line. The umpire makes the decision, asks another linesman, or orders the point replayed.

The center service linesman shall –

1. Judge whether or not the server is standing on the proper side of the center service mark. If the server errs, call a foot fault.
2. Call a fault if the serve lands on wrong side of center service line.

The service linesman shall –

1. Call a fault if the serve lands behind the service line.

The side linesman shall –

1. Judge whether or not the server is standing on the proper side of the side line. If the server errs, call a foot fault.
2. Stand up when the service is in the court he is watching.
3. Call a fault if the serve lands outside the single side line.

The base linesman as foot fault judge shall –

1. Thoroughly understand the foot fault rule.
2. Call a foot fault only when positive the rule has been broken.

DUTIES OF THE NET UMPIRE

The net umpire shall –

1. Sit near the net post and call: (a) lets on service, and (b) balls that go through the net, the call being "fault" or "through."
2. Place his fingers lightly on the net cord during the service to detect service lets which may not be easily seen.
3. Keep a duplicate score of the match.
4. Call "not ups" when requested by the umpire.
5. Note when balls are to be changed and see that the balls are changed at the proper time.

RULES OF LAWN TENNIS AND CASES AND DECISIONS

The appended Code of Rules and Cases and Decisions, revised to 1959, is the Official Code of the International Lawn Tennis Federation, of which the United States Lawn Tennis Association is a member.

The Tournament Regulations is an addendum adopted by the United States Lawn Tennis Association and is official in the United States only, although it in no way conflicts with the Code or international practice.

Explanations, while not official utterances, may be considered a correct guide for interpreting the Rules. They have been prepared by the Tennis Umpires Association to amplify and explain the formal Code.

THE SINGLES GAME

RULE 1

Dimensions and Equipment

The court shall be a rectangle 78 feet long and 27 feet wide. It shall be divided across the middle by a net, suspended from a cord or metal cable of a maximum diameter of 1/3 inch, the ends of which shall be attached to, or pass over, the tops of two posts, 3 feet 6 inches high, the center of which shall be 3 feet outside the court on each side. The height of the net shall be 3 feet at the center, where it shall be held down taut by a strap not more than 2 inches wide. There shall be a band covering the cord or metal cable and the top of the net not less than 2 nor more than 2½ inches in depth on each side. The lines bounding the end and sides of the court shall respectively be called the base lines and the side lines. On each side of the net, at a distance of 21 feet from it and parallel with it, shall be drawn the service lines. The space on each side of the net between the service line and the side lines shall be divided into two equal parts, called the service courts, by the center service line, which must be 2 inches in width, drawn halfway between, and parallel with, the side lines. Each base line shall be bisected by an imaginary continuation of the center service line to a line 4 inches in length and 2 inches in width, called the center mark, drawn inside the court, at right angles to and in contact with such base lines. All other lines shall be not less than 1 inch nor more than 2 inches in width, except the base line, which may be 4 inches in width, and all measurements shall be made to the outside of the lines.

Reprinted by permission from the *Umpire's Manual*, published by the U.S. Lawn Tennis Association, 51 E. 42nd St., New York, N.Y. 10017.

Note–In the case of the International Lawn Tennis Championship (Davis Cup) or other official championships of the International Federation, there shall be a space behind each base line of not less than 21 feet, and at the sides of not less than 12 feet.

Explanation of Rule 1

The posts in doubles should be 3 feet outside the doubles court.

The net should be 33 feet wide for a singles court, and 42 feet wide for a doubles court. It should touch the ground along its entire length and come flush to the posts at all points.

It is good to have a stick 3 feet 6 inches long, with a notch cut in at the 3-foot mark, for the purpose of measuring the height of the net at the posts and at the center. These measurements, as well as the measurements of the court itself, always should be made before starting to play an important match.

RULE 2

Permanent Fixtures

The permanent fixtures of the court shall include not only the net, posts, cord or metal cable, strap, and band, but also, where there are any such, the back and side stops, the stands, fixed or movable seats and chairs around the court, and their occupants, all other fixtures around and above the court, and the umpire, foot fault judge, and linesmen when in their respective places.

Note: For the purpose of this rule, the word "umpire" comprehends the umpire and all those persons designated to assist him in the conduct of a match.

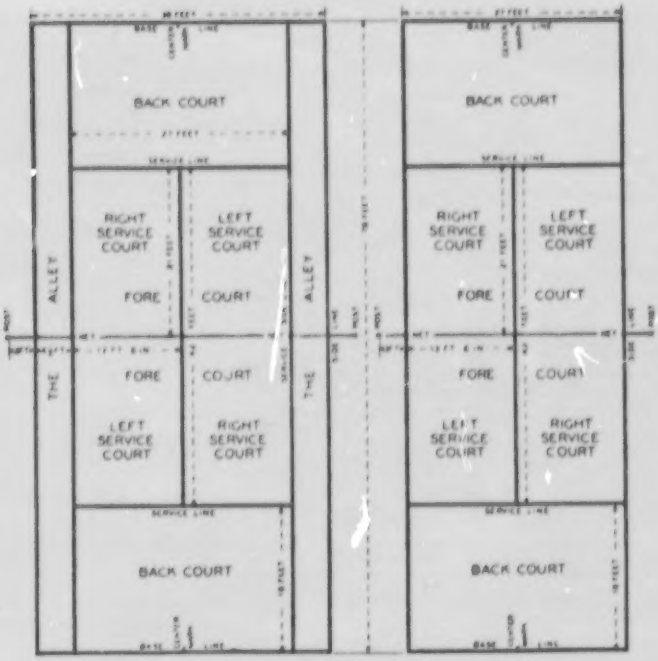
RULE 3

Ball Size, Weight, and Bound

The ball shall have a uniform outer surface. If there are any seams, they shall be stitchless. The ball shall be more than 2-1/2 inches and less than 2-5/8 inches in diameter, and more than 2 ounces and less than 2-1/16 ounces in weight. The ball shall have a bound of more than 53 inches and less than 58 inches when dropped 100 inches upon a concrete base, and the deformation of more than .265 of an inch and less than .290 of an inch when subjected to pressure of 18 lb. applied to each end of any diameter. For regulations for testing balls, see USLTA *Umpire's Manual.*

Note: At the Annual General Meeting of the ILTF held on July 12, 1967, it was agreed that for the time being, nonpressurized balls and low pressure balls may not be used in the International Lawn Tennis Championship (Davis Cup), unless mutually agreed by the two nations taking part in any particular event.

DIAGRAMS AND DIMENSIONS OF A TENNIS COURT



Doubles Singles

Note: "How often may a player have new balls?" According to Tournament Regulation 14g, the umpire, subject to the approval of the referee, may decide when new balls are required to ensure fairness of playing conditions. In matches where there is no umpire, the players should agree beforehand on this matter.

RULE 4

Server and Receiver

The players shall stand on opposite sides of the net; the player who first delivers the ball shall be called the server, and the other the receiver.

Case 1. Does a player, attempting a stroke, lose the point if he crosses an imaginary line in the extension of the net, (a) before striking the ball, (b) after striking the ball?

Decision. He does not lose the point in either case by crossing the imaginary line, provided he does not enter the lines bounding his opponent's court (Rule 18e). In regard to hindrance, his opponent may ask for the decision of the umpire under Rules 19 and 23.

Case 2. The server claims that the receiver must stand within the lines bounding his court. Is this necessary?

Decision. No. The receiver may stand wherever he pleases on his side of the net.

RULE 5

Choice of Sides and Service

The choice of sides and the right to be server or receiver in the first game shall be decided by toss. The player winning the toss may choose or require his opponent to choose –

(a) The right to be server or receiver, in which case the other player shall choose the side; or

(b) The side, in which case the other player shall choose the right to be server or receiver.

RULE 6

Delivery of Service

The service shall be delivered in the following manner: immediately before commencing to serve, the server shall stand with both feet at rest behind (i.e., farther from the net than) the base line, and within imaginary continuation of the center mark and side line. The server shall then project the ball by hand into the air in any direction and before it hits the ground, strike it with his racket; the delivery shall be deemed to have been completed at the moment of the impact of the racket and the ball. A player with the use of only one arm may utilize his racket for the projection.

Case 1. May the server in a singles game take his stand behind the portion of the base line between the side lines of the singles court and the doubles court?

Decision. No.

Case 2. If a player, when serving, throws up two or more balls instead of one, does he lose that service?

Decision. No. A let should be called, but if the umpire regards the action as deliberate, he may take action under Rule 19.

Case 3. If a ball in play becomes broken, should a let be called?

Decision. Yes.

Case 4. May a player serve underhand?

Decision. Yes. There is no restriction regarding the kind of service which may be used, that is, the player may use an underhand or an overhand service at his discretion.

RULE 7

Foot Fault

The server shall throughout the delivery of the service—

(a) Not change his position by walking or running.

(b) Not touch, with either foot, any area other than that behind the base line with the imaginary extension of the center mark and side line.

Note: The following interpretation of Rule 7 was approved by the International Federation on July 9, 1958:

(a) The server shall not, by slight movements of the feet which do not materially affect the location originally taken up by him, be deemed "to change his position by walking or running."

(b) The word "foot" means the extremity of the leg below the ankle

RULE 8

From Alternate Courts

(a) In delivering the service, the server shall stand alternately behind the right and left courts, beginning from the right in every game. If service from a wrong half of the court occurs and is undetected, all play resulting from such wrong service or services shall stand, but the inaccuracy of the station shall be corrected immediately upon discovery.

(b) The ball served shall pass over the net and hit the ground within the service court which is diagonally opposite, or upon any line bounding such court, before the receiver returns it.

Explanation of Rule 8

In the absence of a linesman and umpire, it is customary for the receiver to determine whether the service is good or not.

RULE 9

Faults

The service is a fault—(a) if the server commits any breach of Rules 6, 7, or 8; (b) if he misses the ball in attempting to strike it; (c) if the ball served touches a permanent fixture (other than the net, straps, or band) before it hits the ground.

Case 1. After throwing the ball up preparatory to serving, the server decides not to strike at it and catches it instead. Is it a fault?

Decision. No.

Case 2. In serving in a singles game played on a doubles court with doubles and singles net posts, the ball hits a singles post and then hits the ground within the lines of the correct service court. Is this a fault or a let?

Decision. In serving it is a fault because the singles post, the doubles post, and that portion of the net, strap, or band between them are permanent fixtures. (Rules 2 and 9, and note to Rule 22).

RULE 10

Service After a Fault

After a fault (if it is the first fault), the server shall serve again from behind the same half of the court from which he served that fault, unless the service was from the wrong half, when, in accordance with Rule 8, the server shall be entitled to one service only from behind the other half. A fault may not be claimed after the next service has been delivered.

Case 1. A player serves from a wrong court. He loses the point and then claims it was a fault because of his wrong station.

Decision. The point stands as played and the next service should be from the correct station according to the score.

Case 2. The point score being 15-all, the server, by mistake, serves from the left court. He wins the point. He then serves again from the right-hand court, delivering a fault. The mistake in station is then discovered. Is he entitled to the previous point? From which court should he next serve?

Decision. The previous point stands. The next service should be from the left court, the score being 30-15, and the server has served one fault.

RULE 11

Receiver Must Be Ready

The server shall not serve until the receiver is ready. If the latter attempts to return the service, he shall be deemed ready. If, however, the receiver signifies that he is not ready, he may not claim a fault because the ball does not hit the ground within the limits fixed for the service.

Explanation of Rule 11

The server must wait until the receiver is ready for the second service as well as the first, and if the receiver claims to be not ready

and does not make any effort to return a service, the server may not claim the point, even though the service was good.

RULE 12

A Let

In all cases where a let has to be called under the rules, or to provide for an interruption to play, it shall have the following interpretation:

(a) When called solely in respect of a service, that one service only shall be replayed.

(b) When called under any other circumstances, point shall be replayed.

Case 1. A service is interrupted by some cause outside those defined in Rule 13. Should the service only be replayed?

Decision. No, the whole point must be replayed.

Case 2. If a ball in play becomes broken, should a let be called?

Decision. Yes.

RULE 13

The service is a let –

(a) If the ball served touches the net, strap, or band, and is otherwise good, or, after touching the net, strap, or band, touches the receiver or anything which he wears or carries before hitting the ground.

(b) If a service or a fault is delivered when the receiver is not ready (see Rule 11). In case of a let, that particular service shall not count, and the server shall serve again, but a service let does not annul a previous fault.

RULE 14

When Receiver Becomes Server

At the end of the first game, the receiver shall become server, and the server receiver; and so on alternately in all the subsequent games of a match. If a player serves out of turn, the player who ought to have served shall serve as soon as the mistake is discovered, but all points scored before such discovery shall be reckoned. If a game shall have been completed before such discovery, the order of service remains as altered. A fault served before such discovery shall not be reckoned.

RULE 15

Ball in Play till Point Decided

A ball is in play from the moment at which it is delivered in service. Unless a fault or a let is called, it remains in play until the point is decided.

Case 1. A ball is played into the net; the player on the other side, thinking that the ball is coming over, strikes at it and hits the net. Who loses the point?
Decision. If a player touches the net while the ball is still in play, he loses the point.

RULE 16

Server Wins Point

The server wins the point–

(a) If the ball served, not being a let under Rule 13, touches the receiver or anything which he wears or carries before it hits the ground;

(b) If the receiver otherwise loses the point as provided by Rule 18.

RULE 17

Receiver Wins Point

The receiver wins the point–

(a) If the server serves two consecutive faults;

(b) If the server otherwise loses the point as provided by Rule 18.

RULE 18

Where Player Loses Point

A player loses the point–

(a) If he fails, before the ball in play has hit the ground twice consecutively, to return it directly over the net (except as provided in Rule 22a or c); or

(b) If he returns the ball in play so that it hits the ground, a permanent fixture, or other object, outside any of the lines which bound his opponent's court (except as provided in Rule 22a and c); or

(c) If he volleys the ball and fails to make a good return even when standing outside the court; or

(d) If he touches or strikes the ball in play with his racket more than once in making a stroke; or

(e) If he or his racket (in his hand or otherwise) or anything which he wears or carries touches the net, posts, or metal cable, strap, or band, or the ground within his opponent's court at any time while the ball is in play; or

(f) If he volleys the ball before it has passed the net; or

(g) If the ball in play touches him or anything that he wears or carries except his racket in his hands or hands; or

(h) If he throws his racket at and hits the ball.

Case 1. In delivering a first service which falls outside the proper court, the server's racket slips out of his hand and flies into the net. Does he lose the point?

Decision. If his racket touches the net while the ball is in play, the server loses the point (Rule 18e).

Case 2. In serving, the racket flies from the server's hand and touches the net before the ball has touched the ground. Is this a fault, or does the player lose the point?

Decision. The server loses the point because his racket touches the net while the ball is in play (Rule 18e).

Case 3. A and B are playing against C and D. A is serving to D. C touches the net before the ball touches the ground. A fault is then called because the service falls outside the service court. Do C and D lose the point?

Decision. The call "fault" is an erroneous one. C and D have already lost the point before "fault" could be called, because C touched the net while the ball was in play (Rule 18e).

Case 4. May a player jump over the net into his opponent's court while the ball is in play and not suffer penalty?

Decision. No; he loses the point (Rule 18e).

Case 5. A cuts the ball just over the net and it returns to A's side. B, unable to reach the ball, throws his racket and hits the ball. Both racket and ball fall over the net on A's court. A returns the ball outside of B's court. Does B win or lose the point?

Decision. B loses the point (Rule 18e and h).

Case 6. A player standing outside the service court is struck by the service ball before it has touched the ground. Does he win or lose the point?

Decision. The player struck loses the point (Rule 18g), except as provided under Rule 13a.

Case 7. A player standing outside the court volleys the ball or catches it in his hand and claims the point because the ball was certainly going out of court.

Decision. In no circumstances can he claim the point.

(1) If he catches the ball, he loses the point under Rule 18g.
(2) If he volleys it and makes a bad return, he loses the point under Rule 18c.
(3) If he volleys it and makes a good return, the rally continues.

RULE 19

Player Hinders Opponent

If a player commits any act either deliberate or involuntary which, in the opinion of the umpire, hinders his opponent in making a stroke, the umpire shall in the first case award the point to the opponent, and in the second case order the point to be replayed.

Case 1. Is a player liable to a penalty if in making a stroke he touches his opponent?

Decision. No, unless the umpire deems it necessary to take action under Rule 19.

Case 2. When a ball bounds back over the net, the player concerned may reach over the net in order to play the ball. What is the ruling if the player is hindered from doing this by his opponent?

Decision. In accordance with Rule 19, the umpire may either award the point to the player hindered, or order the point to be replayed (see also Rule 23).

RULE 20

Ball Falling on Line – Good

A ball falling on a line is regarded as falling in the court bounded by that line.

RULE 21

Ball Touching Permanent Fixtures

If the ball in play touches a permanent fixture (other than the net, posts, cord or metal cable, strap, or band) after it has hit the ground, the player who struck it wins the point; if before it hits the ground, his opponent wins the point.

Case 1. A return hits the umpire or his chair or stand. The player claims that the ball was going into the court.

Decision. He loses the point.

RULE 22

Good Return

It is a good return–

(a) If the ball touches the net, posts, cord or metal cable, strap, or band, provided that it passes over any of them and hits the ground within the court; or

(b) If the ball, served or returned, hits the ground within the proper court and rebounds or is blown back over the net, and the player whose turn it is to strike reaches over the net and plays the ball, provided that neither he nor any part of his clothes or racket touch the net, posts, cord or metal cable, strap, or band or the ground within his opponent's court, and that the stroke is otherwise good; or

(c) If the ball is returned outside the post, either above or below the level of the top of the net, even though it touches the post, provided that it hits the ground within the proper court; or

(d) If a player's racket passes over the net after he has returned the ball, provided the ball passes the net being played and is properly returned; or

(e) If a player succeeds in returning the ball, served or in play, which strikes a ball lying in the court.

Note: If in a singles match, for the sake of convenience, a doubles court is equipped with singles posts for the purpose of a singles

game, then the doubles posts and those portions of the net, cord or metal cable, and band outside such singles posts shall at all times be permanent fixtures, and are not regarded as posts or parts of the net of a singles game.

A return that passes under the net cord between the singles and adjacent doubles posts without touching either net cord, net, or doubles posts and falls within the area of play, is a good return.

Case 1. A ball going out of court hits a net post and falls within the lines of the opponent's court. Is the stroke good?

Decision. If a service, no, under Rule 9c. If other than a service, yes, under Rule 22a.

Case 2. Is it a good return if a player returns the ball holding his racket in both hands?

Decision. Yes.

Case 3. The service, or ball in play, strikes a ball lying in the court. Is the point won or lost thereby?

Decision. No. Play must continue. If it is not clear to the umpire that the right ball is returned, a let should be called.

Case 4. May a player use more than one racket at any time during play?

Decision. No, the whole implication of the rules is singular.

Case 5. May a player request that a ball or balls lying in his opponent's court be removed?

Decision. Yes, but not while the ball is in play.

RULE 23

Interference

In case a player is hindered in making a stroke by anything not within his control, except a permanent fixture of the court or except as provided for in Rule 19, the point shall be replayed.

Case 1. A spectator gets into the way of a player who fails to return the ball. May the player then claim a let?

Decision. Yes, if in the umpire's opinion he was obstructed by a circumstance beyond his control, but not if due to permanent fixtures of the court or the arrangement of the ground.

Case 2. A player is interfered with as in Case 1, and the umpire calls a let. The server had previously served a fault. Has he the right to two services?

Decision. Yes; as the ball is in play, the point, not merely the stroke, must be replayed as the rule provides.

Case 3. May a player claim a let under Rule 23 because he thought his opponent was being hindered, and consequently did not expect the ball to be returned?

Decision. No.

Case 4. Is a stroke good when a ball in play hits another ball in the air?

Decision. A let should be called unless the other ball is in the air by the act of one of the players, in which case the umpire will decide under Rule 19.

Case 5. If an umpire or other judge erroneously calls "fault" or "out," and then corrects himself and calls "play," which of the calls should prevail?

Decision. A let must be called, unless, in the opinion of the umpire, neither player was hindered in his game, in which case the corrected call shall prevail.

Case 5. If an umpire or other judge erroneously calls "fault" or "out," and then corrects himself and calls "play", which of the calls should prevail?

Decision. A let must be called, unless, in the opinion of the umpire, neither player was hindered in his game, in which case the corrected call shall prevail.

Case 6. If the first ball served—a fault—rebounds, interfering with the receiver at the time of the second service, may the receiver claim a let?

Decision. Yes. But if he had an opportunity to remove the ball from the court and negligently failed to do so, he may not claim a let.

Case 7. Is it a good stroke if the ball touches a stationary or moving object on the court?

Decision. It is a good stroke unless the stationary object came into the court after the ball was put into play, in which case a "let" must be called. If the ball in play strikes an object moving along or above the surface of the court, a "let" must be called.

Case 8. What is the ruling if the first service is a fault, the second service correct, and it becomes necessary to call a let either under the provision of Rule 23 or if the umpire is unable to decide the point?

Decision. The fault shall be annulled and the whole point replayed.

RULE 24

The Game

If a player wins his first point, the score is called 15 for that player; on winning his second point, the score is called 30 for that player; on winning his third point, the score is called 40 for that player; and the fourth point won by a player is scored game for that player, except as follows:

If both players have won three points, the score is called deuce; and the next point won by a player is called advantage for that player. If the same player wins the next point, he wins the game; if the other player wins the next point, the score is again called deuce; and so on, until a player wins the two points immediately following the score at deuce, when the game is scored for that player.

RULE 25

The Set

A player (or players) who first wins six games wins a set, except that he must win by a margin of at least two games over his opponent; where necessary, a set shall be extended until this margin is achieved.

RULE 26

When Players Change Sides

The players shall change sides at the end of the first, third, and every subsequent alternate game of each set, and at the end of each set, unless the total number of games in such set is even, in which case the change is not made until the end of the first game of the next set.

RULE 27

Maximum Number of Sets

Maximum number of sets in a match shall be five, or, where women take part, three.

RULE 28

Rules Apply to Both Sexes

Except where otherwise stated, every reference in these rules to the masculine includes the feminine gender.

RULE 29

Decisions of Umpire and Referee

In matches where an umpire is appointed, his decision shall be final; but where a referee is appointed, an appeal shall lie to him from the decision of an umpire on a question of law, and in all such cases the decision of the referee shall be final.

The referee, at his discretion, may at any time postpone a match on account of darkness or the condition of the ground or the weather. In any case of postponement, the previous score and the previous occupancy of courts shall hold good, unless the referee and the players unanimously agree otherwise.

RULE 30

Play shall be continuous from the first service till the match is concluded, provided that after the third set or, when women take part, the second set, either player is entitled to a rest which shall not exceed ten minutes, or in countries situated between latitude 15° north and latitude 15° south, 45 minutes, and provided further that when necessitated by circumstances not within the control of the players, the umpire may suspend play for such a period as he may consider necessary. If play is suspended and is not resumed until a later day, the rest may be taken only after the third set (or when

women take part, the set) of play on such later day, completion of an unfinished set being counted as one set. These provisions shall be strictly construed, and play shall never be suspended, delayed, or interfered with for the purpose of enabling a player to recover his strength or his wind, or to receive instruction or advice. The umpire shall be the sole judge of such suspension, delay or interference, and after giving due warning, he may disqualify the offender.

Note. (a) Any nation is at liberty to modify the first provision of Rule 30, or omit it from its regulations governing tournaments, matches, or competitions held in its own country, other than the International Lawn Tennis Championships (Davis Cup and Federation Cup).

(b) When changing sides a maximum of one minute shall elapse from the cessation of the previous game to the time players are ready to begin the next game.

Explanation of Rule 30

In men's events, there is no rest in a two-out-of-three set match, but in a three-out-of-five-set match, a ten minute rest may be taken only after the third set. It may not be taken before the third set or at any time after the fourth set has been started. It must be taken after the third set or not at all.

In women's matches a rest of ten minutes may be taken after the second set or not at all.

All matches for Juniors shall be the best two-out-of-three sets with no rest. In the case of tennis center championships or interscholastic, state, and sectional tournaments, equivalent to tennis centers, and in National Junior Championships, the final round shall be the best three-out-of-five sets. If such final round requires more than three sets to decide, there must be a rest of ten minutes after the third set.

Matches for boys and girls 15 and under shall be the best two-out-of-three sets, and there must be a ten minute rest after the second set.

The United States Lawn Tennis Association has approved a modification of the first provision in Rule 30 to provide that after the second set in tournaments exclusively for seniors and in tournaments for fathers and sons, either player or doubles team is entitled to a rest which shall not exceed ten minutes.

The players must be back on the court ten minutes after play has ceased.

Should a player, on account of physical unfitness or an unavoidable accident not within his control, be unable to continue play, he must be defaulted.

"Stalling" is one of the hardest things to deal with. The rules say that "play shall be continuous." An umpire should determine whether the "stalling" is deliberate and for the purpose of gaining time. If he decides that it is, he should warn the player to stop his unfair practice; if this does not end it, he should then default him.

The umpire has the power to suspend a match for such period as he may think necessary, if, in his judgment, the play is interfered with by circumstances beyond the players' control. Such circumstances might be the passing of an airplane, moving of spectators in the stands, etc.

Case 1. A player's clothing, footwear, or equipment becomes out of adjustment in such a way that it is impossible or undesirable for him to play on. May play be suspended while the maladjustment is rectified?

Decision. If this occurs in circumstances not within the control of the player, of which circumstances the umpire is the sole judge, a suspension may be allowed.

Case 2. If, owing to an accident, a player is unable to continue immediately, is there any limit to the time during which play may be suspended?

Decision. No allowance may be made for natural loss of physical condition. Consideration may be given by the umpire for accidental loss of physical ability or condition.

Case 3. During a doubles game, may one of the partners leave the court while the ball is in play?

Decision. Yes, so long as the umpire is satisfied that play is continuous within the meaning of the rules, and that there is no conflict with Rules 33 and 34.

THE DOUBLES GAME

RULE 31

The above rules shall apply to the doubles game except as below.

RULE 32

Dimensions of Court

For the doubles game, the court shall be 36 feet in width, i.e., 4½ feet wider on each side than the court for the singles game, and those portions of the singles side lines which lie between the two service lines shall be called the service side lines. In other respects, the court shall be similar to that described in Rule 1, but the portions of the singles side lines between the base line and the service line on each side of the net may be omitted if desired.

Case 1. In doubles, the server claims the right to stand at the corner of the court as marked by the doubles side line. Is the foregoing correct or is it

necessary that the server stand within the limits of the center mark and the single side line?

Decision. The server has the right to stand anywhere between the center mark and the doubles side line.

RULE 33

Order of Service

The order of serving shall be decided at the beginning of each set as follows:

The pair who have to serve in the first game of each set shall decide which partner shall do so, and the opposing pair shall decide similarly for the second game. The partner of the player who served in the first game shall serve in the third; the partner of the player who served in the second game shall serve in the fourth, and so on in the same order in all subsequent games of a set.

Case 1. In doubles, one player does not appear in time to play, and his partner claims to be allowed to play single-handed against the opposing players. May he do so?

Decision. No.

RULE 34

Order of Receiving

The order of receiving the service shall be decided at the beginning of each set as follows:

The pair who have to receive the service in the first game shall decide which partner shall receive in the first service, and that partner shall continue to receive the first service in every odd game throughout that set. The opposing pair shall likewise decide which partner shall receive the first service the second game and that partner shall continue to receive the first service in every even game throughout that set. Partners shall receive the service alternately throughout each game.

Explanation of Rule 34

The receiving formation of a doubles team may not be changed during a set, only at the start of a new set. Partners must receive throughout each set on the same sides of the court which they originally select when the set begins. The first server is not required to receive in the right court; he may select either side, but must hold this to the end of the set.

Case 1. Is it allowable in doubles for the server's partner to stand in a position that obstructs the view of the receiver?

Decision. Yes. The server's partner may take any position on his side of the net in or out of the court that he wishes.

RULE 35

Service Out of Turn

If a partner serves out of his turn, the partner who ought to have served shall serve as soon as the mistake is discovered, but all points scored, and any fault served before such discovery, shall be reckoned. If a game shall have been completed before such discovery, the order of service remains as altered.

RULE 36

Error in Order of Receiving

If during a game the order of receiving the service is changed by the receivers, it shall remain as altered until the end of the game in which the mistake is discovered, but the partners shall resume their original order of receiving in the next game of that set in which they are receivers of the service.

RULE 37

Ball Touching Server's Partner Is a Fault

The service is a fault as provided for by Rule 9, or if the ball served touches the server's partner or anything he wears or carries; but if the ball served touches the partner of the receiver or anything which he wears or carries not being a let under Rule 13a, before it hits the ground, the server wins the point.

RULE 38

Ball Struck Alternately

The ball shall be struck alternately by one or the other player of the opposing pairs, and if a player touches the ball in play with his racket in contravention of this rule, his opponents win the point.

CONDITIONS GOVERNING TENNIS PLAYERS

Section 1

The following categories of tennis players are recognized as within the jurisdiction of the USLTA.

(a) Amateurs
(b) Players

Section 2

Any tennis player is an amateur who does not receive and has not received, directly or indirectly, pecuniary advance by the playing, teaching, demonstrating or pursuit of the game, except as expressly permitted by the USLTA.

An amateur will not be deemed to have received pecuniary advantage by reason of:

(1) being reimbursed for reasonable expenses actually incurred by him in connection with his participation in a tournament, match or exhibition, or
(2) being the recipient of a scholarship or other benefits authorized by his school (high school, college or university) which do not affect his eligibility as a tennis player for such school.

Section 3

Any tennis player who is still eligible to play in any age category under 19 years of age will be permitted to participate in a tournament, match or exhibition only if he is in good standing under amateur regulations.

Section 4

All other tennis players who accept the authority of, and who are in good standing with the USLTA shall be designated as players.

Section 5

Both amateurs and players shall play only in tournaments, matches or exhibitions which are sanctioned or approved by the USLTA, and both amateurs and players may compete in all such sanctioned or approved tournaments, matches or exhibitions; provided, that players may not participate in tournaments, matches, or exhibitions expressly limited to amateurs.

Section 6

An amateur is prohibited from and will forfeit his amateur status by engaging in any of the following:

(a) Participation in an unauthorized competition;

(b) Playing for a money prize or gate receipts;

(c) Playing, coaching, instructing or demonstrating the game (except as authorized in Section 8 and 9 of this Article);

(d) Accepting money or gaining pecuniary advantage from permitting his name or likeness to be advertized as the user of any goods of a manufacturer, merchant, wholesaler, retailer or otherwise;

(e) Permitting the taking of action film of himself and receiving remuneration therefor;

(f) Allowing his name to be used as the author of any book or article on tennis if he is in fact not the author or by receiving payment or consideration for services which he does not actually render;

(g) Allowing the use of his name or likeness on sporting goods or in any advertising or other sales promotion of such goods;

(h) Reporting or commenting in the press, radio or TV for money or for any consideration, any tournament, match or exhibition in which he is then participating;

(i) Playing in any tournament, match or exhibition where admission is charged, or for which expenses are paid, unless such event has been sanctioned or approved by the USLTA;

(j) Making any financial arrangement directly with a foreign national association, area or club without the consent of the USLTA;

(k) Entering two or more tournaments, matches or exhibitions scheduled to be played at the same time; or by committing orally or in writing to play and failing to appear; or

(l) Acting in a manner detrimental to the welfare of the game.

Section 7

(a) An amateur may enter into a bona fide arrangement for his services (as an employee, an agent, or a consultant) with a manufacturer or seller of sporting goods or other products, provided the services to be performed will not violate any of these regulations. Upon the written request of the Rules and Discipline Committee of the USLTA or the Executive or Administrative Committee of the USLTA, an amateur shall fully inform such Committee of the details of any such arrangement, including the furnishing to such Committee of any written agreement, correspondence, and memoranda relating thereto, and including a sworn statement as to such details if so requested.

(b) Upon the written request of the Rules and Discipline Committee of the USLTA or the Executive or Administrative Committee of the USLTA, an amateur shall fully inform such Committee as to all expenses paid in connection with his participa-

tion in any tournament, match or exhibition including the furnishing to such Committee of such additional information as may be requested, and including a sworn statement as to such expenses if so requested.

(c) Failure to comply promptly and fully with paragraphs (a) and (b) above will be grounds for immediate suspension, which suspension shall continue until the amateur has so complied with such request.

Section 8

An undergraduate or a graduate student in regular full-time attendance at a recognized high school, college or university, or a faculty member as described in Section 9 below, will not lose amateur status because of accepting employment as:

(a) A counselor at a summer camp, or

(b) an assistant to a teaching professional or

(c) an employee or tennis instructor at a club or establishment where tennis is played, or

(d) an employee or tennis instructor of a Sectional or District association of the USLTA, a city recreation department or its equivalent, or a recognized tennis patrons organization, or

(e) employment in a public junior development program. Remuneration for any such employment may only be on a fixed weekly or monthly basis and may not be on a lesson or hourly basis.

This section is not applicable to an amateur who is ranked nationally in the first twenty.

Section 9

Regular full-time members of the faculty of a recognized high school, college or university may teach tennis to the pupils or coach the tennis team as part of their faculty assignments, without affecting their amateur standing.

Section 10

(a) Whenever charges are made against a person of a violation of any amateur regulation and are filed in writing with the Rules and Discipline Committee, the chairman of such Committee and the president, acting jointly, are empowered to suspend such person pending a hearing before such Committee and the president, or pending a hearing before the president, or the chairman of such Committee, or any other member of such Committee who may be designated by the chairman to conduct such hearing, which hearing shall be held promptly following the filing of such charges.

(b) Following any such suspension and hearing, a written report and recommendation shall promptly be submitted to the

Executive Committee of the USLTA, which Committee need not conduct a further hearing before finally acting on the matter. Such final action may be a removal of such suspension, or a continuation of such suspension for a specified period of time, or a disqualification of such person as an amateur. Any such action must have the concurrence of a majority of the members of the Executive Committeee of the USLTA.

(c) Any person who has been disqualified by the Executive Committee of the USLTA may be reinstated by such Committee on evidence satisfactory to it that reinstatement is merited.

Section 11

Wherever used herein,

(a) the masculine pronoun shall be charged to the feminine when the person involved is of the feminine sex;

(b) a person's name includes his initials and any other identification of his identity; and

(c) teaching includes coaching and instructing.

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USLTA TOURNAMENT REGULATIONS

1. The Tournament Regulations hereinafter contained and the Rules of Lawn Tennis shall be observed throughout all tournaments held by clubs or associations belonging directly or indirectly to the United States Lawn Tennis Association.

2. No checks or cash payments in any form shall be given as prizes. The value of a prize shall not be advertised. If any challenge cup is offered, it shall be deeded to the USLTA or to the sectional association having jurisdiction of the event for which such cup is donated. The winner of a challenge cup shall be entitled to possession of the cup until one month previous to the next competition for the cup, provided he give bond satisfactory to the club. Should the club give possession without such bond, it shall be liable to the USLTA or sectional association for the value of the cup. Any challenge cups except those deeded to the USLTA for USLTA championships, USLTA and international team matches shall, upon request by resolution of the sectional association having jurisdiction of the event for which such cup was donated, be deeded to such sectional association.

3. The officers of the club holding a tournament shall have full power over all details concerning the tournament. They may themselves act as the tournament committee and will be so regarded unless they delegate their authority to others. Only an amateur may hold an official position such as referee or chairman of a committee that is responsible to the USLTA for the proper conduct of a USLTA or sectional championship.

4. A circular shall be issued by the committee specifying the conditions of competition, and including the names of the committee and of the referee.

5. The committee shall elect a referee, with power to appoint a substitute. The referee or his substitute must be present at all times when play is in progress.

Explanation The referee may not umpire or participate in a match unless he appoints a substitute to act as referee while he is umpiring or playing.

6. The referee shall during the tournament be ex officio a member of the committee.

7. The committee shall keep order on the grounds, and shall decide any question arising out of the competition, except a point of law, if summoned for that purpose by the referee or by any two of their number, and they shall have power, when so convened, if the

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misconduct of a competitor be reported to them by a member of the committee or by an umpire, to disqualify the offender after a hearing. The members of the committee present on the grounds shall constitute a quorum.

8. The referee or his substitute shall have power to appoint and remove umpires and linesmen, to assign courts, and to start matches. The referee shall decide any point of law which an umpire may be unable to decide, or which may be referred to him on appeal from the decision of an umpire; such decision shall be final unless reversed by the USLTA Executive Committee.

In order to affect the scoring of a match, an appeal must be taken to the referee immediately and play suspended pending the decision, which the referee shall make forthwith. As a general, a reversal of the referee's decision by the Executive Committee shall not cause a reopening of the match involved, which shall stand as played, but such reversal shall constitute a precedent for future decisions. However, when the decision concerns the final match of a tournament, and the interests of justice so require, the Executive Committee may in its discretion award the match to the aggrieved party or order it replayed.

9. The decision of an umpire shall be final upon every question of fact, and no competitor may appeal from it; but if an umpire is in doubt as to a point of law, or if a competitor appeals from his decision, the umpire shall submit the question to the referee, whose decision shall be final, unless reversed by the USLTA Executive Committee. A question of fact relates to events that actually occurred. A question of law is the construction and application of the rules of the game to the admitted facts.

10. The referee may, whether appealed to by any competitor or not, postpone the meeting, or any match or part of a match, if in his opinion the state of the weather, or of the light, or of the condition of the ground, or other circumstances, renders it advisable to do so.

11. In all tournaments and matches sanctioned by the USLTA, the use of spikes is prohibited unless the referee shall determine that ground conditions justify their use. The use of spikes longer than 3/8 of an inch is prohibited under any circumstances. In all such tournaments or matches played on any surface other than grass, heelless flat-soled shoes must be worn. Shoes having heels may not be worn on any playing surface.

12. If a competitor is not ready when called upon to play and has not been excused, he may be defaulted. If, after play begins, a player fails to continue as required by the rules, through illness or other cause, his opponent shall be entitled to win, which shall be scored by recording the sets and games actually finished and adding the word "retired", e.g., A defeated B, 3-6, 4-2, retired.

13. The referee shall not bet on any match, nor shall an umpire or linesman bet on the match to which he is assigned. An infraction of this rule shall be followed by the immediate removal of the offending referee, umpire, or linesman.

14. It is the duty of an umpire–

(a) To ascertain that the net is the right height before the commencement of play, and to measure and adjust the net during play after each set and other times, if asked to do so, or if in his opinion its height has altered.

(b) To call service faults, lets, outs, and foot faults unless such powers be delegated to linesmen or net umpire.

Explanation–In matches where there are no base linesmen the umpire shall judge foot faults, but should call only those that are perfectly obvious from his position in the chair.

(c) To call the points when won, or when he is asked to call them, and to record them upon the scorecard.

(d) To call the games and the sets at the end of each, or when asked to call them, and to record them on the scorecard. At the end of each game, the games should be called with the name of the player who is in advance, thus: "One game to nothing; A leads," or "two games to one; B leads." If the games are even, the score should be called thus: "Three games all," or as the case may be. At the end of each set, the sets should be called in like manner.

(e) To direct the competitors to change sides, in accordance with Rule 25.

(f) When appealed to during a rally, whether or not a doubtful ball is "in play," say nothing; an appeal should not be made, as the ball is presumed to be good until "out" or "fault" is called.

Case I. A ball was driven to the base line of the opponent's court. The latter was in doubt whether it was good or not and called to the umpire for a decision, there being no linesman. The umpire, not being able to give an instant decision, said nothing. Play continued, and finally the player who asked for the decision knocked the ball out of court. The umpire had by that time confirmed his firm impression–that the disputed ball was out–and awarded the point to the player who had, in the course of the rally, knocked the ball out. Was the umpire right?

Decision. Yes.

Explanation–This differs from the old regulations which instructed the umpire to call "play"; he is now directed to say nothing.

(g) To decide all doubtful or disputed strokes subject to the decision of the linesman, and all points of law, subject to an appeal to the referee; to decide when new balls are required, subject to the approval of the referee and to be

responsible for the proper conduct of the match, including its discontinuance, subject to the approval of the referee.

Explanation—The latter part of this regulation gives authority to the umpire to stop a match on account of light, ground, or weather conditions, subject to the referee's approval.

(h) To see that play is resumed promptly at the expiration of time allowed for rest.

Explanation—Players must return to the court ten minutes after stopping play.

(i) To sign the scorecard and to deliver it at the conclusion of the match to such person as the committee may authorize to receive it, provided that no omission of any of the foregoing duties on the part of an umpire shall of itself invalidate any point, game, or match.

15. It is the duty of the linesman to call faults, and to decide strokes relating to the line or lines to which he is assigned, and to said line or lines only, and such decision shall be final. Should the linesman be unable to give a decision, the umpire may call upon another linesman to do so whose position is such as to enable him to give a correct decision, or he may direct the stroke to be played again.

Case 1. The ball strikes the ground close to a line; the umpire scores the point against the player who last struck the ball. On appeal to the linesman, the latter decides that the ball was not out. The umpire must then order the point replayed.

Explanation—The USLTA Executive Committee has ruled that, in accordance with Rule 23, Case 5, a linesman has the power to correct a mistaken decision which he has made. By this is meant that when a linesman calls a ball "out" that he immediately realizes was good, he should instantly apprise the umpire of his error. The umpire then must order the point replayed unless in the opinion of the umpire neither player was hindered in his game, in which case the corrected call shall prevail.

16. A competitor may appeal to the referee for the removal of the umpire or any linesman of his match.

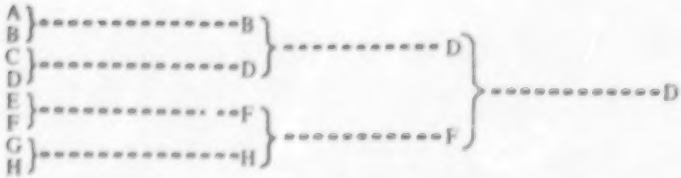
Explanation—The referee should give consideration to the reasons why the removal is requested and act only if they are well founded, not simply on a competitor's objection.

17. No competitor may transfer his entry to another player.

18. Competitors shall have the right, by themselves or their deputies, to be present at the draw.

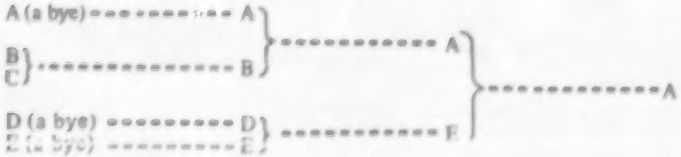
HOW TO MAKE THE DRAW

19. When the number of competitors is 4, 8, 16, 32, 64, 128, or any higher power of 2, they shall meet in pairs, in accordance with the system shown by the following diagram.



20. When the number of competitors is not a power of 2, there shall be byes in the first round. The purpose of having byes is to bring into the second round a number of competitors that is a power of 2. To determine the number of byes, subtract the number of competitors from the next higher power of 2; to determine the number of competitors in the first round, subtract the number of byes from the total number of competitors. If the byes are even in number, one-half of them shall be placed at the top of the draw and one-half at the bottom of the draw; if they are uneven in number, there shall be one more bye at the bottom than at the top. The byes in the top shall be the names first drawn. The next names drawn shall be placed in the first round. The byes in the bottom half are drawn last.

Series 1—From 5 to 8 Competitors



With 6 there will be 1 bye at the top and 1 bye at the bottom; with 7, 1 bye at the bottom; with 8, no byes.

RULES FOR SEEDING THE DRAW

1. All championships and other sanctioned tournaments shall have a seeded draw conducted in accordance with the following rules:
   a. The committee in charge of a tournament shall have full power in making the draw.
   b. The number of seeded players shall be determined by the committee, subject to the limitation that not more than one player be seeded for every eight entries.

2. If two are to be seeded, numbers 1 and 2 shall be drawn by lot; the first drawn shall be placed at the top of the upper half, the second at the bottom of the lower half.

If four are to be seeded, numbers 1 and 2 are treated as above. Numbers 3 and 4 shall be drawn by lot; and first drawn shall be placed at the top of the second quarter; the second shall be placed at the bottom of the third quarter.

If more than four are to be seeded, refer to the USLTA *Umpire's Manual*.

3. The names of all unseeded competitors shall be drawn at random and copied onto the drawsheet in the order drawn.

SANCTION RULES

1. Tournaments seeking USLTA sanction should apply to their sectional associations as early as possible.
2. A complete report of all matches played in the tournament must be furnished to the USLTA office containing full names and addresses of all contestants (where possible) within ten days after the completion of the event.
3. All players competing in a sanctioned tournament must have membership in the USLTA. The fee is $4 for adults and $1 for juniors. Application blanks are obtainable from sectional chairmen.

SUGGESTIONS FOR MODIFIED RULES

Many teachers have requested information regarding the kind of modifications that could be made for matches when time is a factor. Some possible suggestions are listed below. Although unofficial, these rules also appear in the 1969 Official USLTA Yearbook and Tennis Guide.

Rules of VASSS Single Point

VASSS is an alternate tennis scoring system which creates a game simpler to understand; schedule (set takes 30 minutes); and handicap (better than golf). It also abolishes the marathon set, by introducing the VASSS 9 point "tiebreak." All USLTA rules apply except in scoring.

1. It is scored as at table tennis—1, 2, 3, 4.
2. The serve changes from A to B every 5 pts. (5, 10, 15). This 5-point sequence is called a "Hand." Serve changes at the end of the set, but not side.

3. The first point in each "hand" is served into the right or forehand court.
4. Sides (N-S) are changed on the odd hand, 5 pts. (5-15-25).
5. The official set is fixed at 31 points. But where time is at a premium, 21 points may be used.
6. If there is no umpire the server is required to call score loud and clear after each point.
7. The winner of the set must lead by at least 2 points (31-29).
8. If the score is tied at 30-30 in points in the set, or 1-1 in sets in a 2-set match (see Rule 8), 5 out of 9 points are played to decide the winner. This is called the tiebreak.
9. In the tiebreak, the players spin the racket. The winner of the "spin" has choice of serving first, A (1, 2, 5, 6) or B, (3, 4, 7, 8, 9) or of taking choice of sides (North-South). Service (A & B) changes after 2 points (2, 4, 6). Sides (N-S) are changed after 4 points. B may choose to serve the 9th and final point either left or right. (Follow serving sequence on diagram.) The loser of the tiebreak shall commence serving in the following set without changing sides.
10. In doubles, the same player on team A will serve points 1 & 2, his partner 5 & 6. On team B, the same player serves points 3 & 4 and his partner, points 7, 8, & 9.
11. In regular play, a match may be either 2 sets or 4 sets with the 5 out of 9-point tiebreak to decide the winner if sets are divided, or the regular 2 out of 3, or 3 out of 5 set match formula may be used.

TIEBREAK DIAGRAM

If tied at 4-4, B has the right to serve the 9th point either right or left.

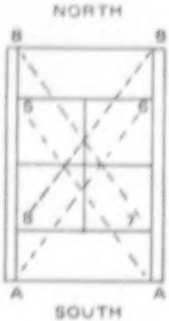


Figure 1

Handicap Rules

Play shall proceed as if the points of the handicap had actually been played. Examples:

(a) Handicap 2 points: Server commences serving point 3 into right or forehand court. Services and side both change after 3 points (2+3=5).

(b) Handicap 6 points: Server commences serving point 7 into the left or backhand court. Service changes after 4 points (6+4=10). Side shall change after 9 points (6+9=15).

The giver of the handicap shall have the choice of service and side in the opening set, choice of service only in subsequent sets. At the conclusion of each set players shall not change sides. (N-S). To estimate handicap points to be received at 30-30 in 9-point tiebreak, for 1-3 points there will be no points handicap, 4-7 points—1-point handicap, 8-14 points—2-point handicap, 15-21 points—3-point handicap, 22-30 points—4-point handicap.

In the 9-point tiebreak handicap points shall be considered as if already played. Examples: (a) 1-point handicap, A shall serve point 2 into the left or backhand court. (b) 2-point handicap, B shall serve point 3 into the right or forehand court. (See Diagram).

Rules of VASSS "No-Ad"

(All USLTA rules apply except in scoring)

1. The advantage point is eliminated in the game, and the advantage game in the set.
2. The first to win 4 points, 1, 2, 3, 4, (not 15, 30, 40), wins the game, the first to win 6 games wins the set. (See Rules 9, 10, and Tiebreak Diagram.) It must be emphasized that "no-ad" does not have the handicap advantage of "31 point."

VASSS Rules for Scoring Round Robin Medal Play (RRMP)

A "round" may be any multiple of 20 (40-60-80) total points or one 31-point set. If a 31-point set is used, the winner shall receive a 5-point bonus for the win, plus the unplayed points in the set; (e.g.: A wins 31-10, his score will be 31+5+20=56 points).

Service and sides are changed as in 31-point. See Rules 2, 3, 4, 5.

Individual handicaps are estimated against scratch for the number of points in a round as decided by the tournament committee.

Tournament Team handicap is the sum of the individual players' handicaps.

In case of a tie, see Rule 9 and 10, and follow Tiebreak Diagram.

"TIE-BREAK" PROCEDURES FOR TENNIS

Authorized for 1971 USLTA Sanctioned Tournaments at 6 Games All

Permission for sanctioned tournaments to employ a "sudden-death" tie-breaking procedure is embodied in the unanimous passage by the USLTA Executive Committee September, 1970 of a resolution proposed by the Special Committee on Scoring and Playing Rules (a subcommittee of the Long Range Planning Committee).

The resolution outlined a specific procedure to be used—after 6-all— and said the procedure *may* be used, at the option of the tournament committee, either throughout the tournament or event or in a designated round or rounds, with such matches to be considered, for ranking purposes, as having equal merit with matches not utilizing the tie-breaking procedure. A basic provision is that reasonable notice shall be afforded competitors prior to the commencement of competition.

This departure from conventional scoring is permissive, *not mandatory*.

The specified (and only authorized) tie-break methods are 5-out-of-9 points and 7-out-of-12 points.

5 out of 9 Points

Singles: If it is Player A's turn to serve the 13th game (at 6-all) he shall serve Points 1 and 2, right court and left court; Player B then serves Points 3 and 4 (R and L). Players then change sides, and A serves Points 5 and 6; B serves Points 7 and 8. If the score reaches 4 points all, Player B serves Point 9 from the right or left court at the election of the receiver.

The set shall be recorded as 7 games to 6. The tie-break counts as one game in reckoning ball-changes.

Player B shall serve first in the set following the playing of the tie-break (thus assuring that he will be first server if this set also goes into a tie-break). The players shall "stay for one" after a tie-break.

If both the first two sets in a best-of-three set match or if either two or four sets in a best-of-five set match end in tie-break games, the players shall spin a racket at the start of the final set to establish service order and side.

(Umpires should note that, if this results in a change in serving sequence, the next ball change, if any, should be deferred one game to preserve the alternation of the right to serve first with new balls.)

Doubles: In Doubles the same format as in singles applies, provided that each player shall serve from the same end of the court

in the tie-break game that he has served from during that particular set. (The tie-break sequence shall count as one game for ball-change reckoning.)

7 out of 12 Points

Singles: Player A shall serve Points 1 and 2, right court and left court; Player B serves Points 3 and 4; A serves Points 5 and 6. The players then change sides; B serves Points 7 and 8; A serves Points 9 and 10; B serves Points 11 and 12. If either player wins 7 points, the set is recorded 7 games to 6. If the score of the tie-break game reaches 6 points all the players shall change sides and play shall continue with serve alternating on every point until one player establishes a margin of 2 points, as follows:

A serves the 13th point (right court), B serves Point 14 (right); A serves Point 15 (left); B serves Point 16 (left). If the score is still tied, the players change sides every 4 points and repeat this procedure.

Player B shall serve first in the set following the playing of the tie-break. The players shall "stay for one."

If both the first two sets in a best-of-three set match or if either two or four sets in a best-of-five set match end in tie-break games, the players shall spin a racket at the start of the final set to establish service order and side.

Doubles (A and B versus C and D): Assuming that Player D has served the 12th game to make the score 6 games all, the teams shall "stay" for the first 2 points of the tie-break, then change sides and change every 4 points thereafter during the first 12 points. A shall serve Points 1 and 2, right court and left court; change sides; C serves Points 3 and 4; B serves Points 5 and 6; change sides; D serves Points 7 and 8; A serves Points 9 and 10; change sides; C serves Points 11 and 12. If either team wins 7 points, the set is recorded 7 games to 6.

If the score of the tie-break game reaches 6 points all, B shall serve Point 13 from the right court; change sides; D serves Point 14 from the right court; A serves Point 15 from the left court; change sides; C serves Point 16 from the left court; B serves Point 17 from the right court; change sides, etc. etc.

Upon completion of the tie break game the teams shall "stay for one," and either C or D members of the team who served the last full game (before the tie-break) shall serve the first game of the next set.

If both the first two sets in a best-of-three set match or if either two or four sets in a best-of-five set match end in tie-break games, the players shall spin a racket at the start of the final set to establish service order and side.

The tie-break counts as one game in reckoning balance changes.

The Special Committee in its resolution mentioned not only the need for "reasonable limitations" on the length of matches as a key condition of television sponsorship, but also "the interest and convenience of paying spectators, their desire to rely on the scheduling of matches involving different players, and their commitments elsewhere."

It also pointed out that even "local tournaments" generally involve evening play, with limited time available for match completion. It said use of this method would "not materially interfere with the stragetical or mental outlook of the players, and retention of traditional scoring through 6-games-all assures reasonable testing of endurance and fitness without undue burden on spectators or television programming."

The "endless set," said the Committee, "is considered the most urgent of the playing rules problem areas, and one that might be solved with a minimum of departure from conventional scoring."

NAGWS OFFICIATING SERVICES

Through its standing committee on Officiating Standards, Examinations and Techniques, the National Association for Girls and Women in Sport (NAGWS) provides materials for the training and rating of officials in ten sports and sets standards for ratings designed to meet the needs of various levels of sports events. Approximately 200 Boards of Officials throughout the United States are affiliated with NAGWS. These Boards provide opportunities for interested individuals to learn about officiating or judging and are authorized to give NAGWS ratings.

The Officiating Standards, Examinations and Techniques Committee includes the P T of O (Principles and Techniques of Officiating) Chairmen. These individuals are concerned specifically with enumerating the mechanics used by referees, umpires and judges in officiating games, meets or matches. The Officiating Standards, Examinations and Techniques Committee also includes an E & R (Examinations and Ratings) Chairman for each sport in which ratings are given. Each chairman and her committee are responsible for preparing, revising and analyzing the officiating theoretical (written) examinations.

If you have questions concerning the techniques of officiating tennis, write to Ann Valentine, Chairman, Tennis Principles and Techniques of Officiating Committee, Brigham Young University, Provo, UT 84601.

Questions relative to Badminton should be sent to Myrna Stephens, Chairman, Badminton Principles and Techniques of Officiating Committee, Illinois State University, Normal 61761.

Information regarding the study questions in the *Guide* or questions on the written examination for tennis should be addressed to Claudia Giacomini, Chairman, Tennis Examinations and Ratings Committee, Sequoia High School, Redwood City, CA 90263.

Information regarding the study questions in the *Guide* or questions on the written examination for badminton should be addressed to Betty Alexander, Chairman, Badminton Examinations and Ratings Committee, Sam Houston State University, Huntsville, TX 77340.

TENNIS PRINCIPLES AND TECHNIQUES OF OFFICIATING COMMITTEE CHAIRMAN

ANNE PITTMAN, Arizona State Univ., Tempe 85281

TENNIS EXAMINATIONS AND RATINGS COMMITTEE CHAIRMAN

CLAUDIA GIACOMINI, Sequoia High School, Redwood City, CA 90263

BADMINTON PRINCIPLES AND TECHNIQUES OF OFFICIATING COMMITTEE CHAIRMAN

JEAN PANKONIN, Illinois State Univ., Normal 61761

BADMINTON EXAMINATIONS AND RATINGS COMMITTEE CHAIRMAN

JEANETTE WIESER, Sam Houston State Univ., Huntsville, TX 77340

STANDARDS FOR OFFICIALS RATINGS

Badminton, Basketball, Softball, Swimming, Tennis, Track-Field, and Volleyball

There are four officials ratings. Each is designed to meet the needs of various levels of sports events and to stimulate interest of individuals who desire to officiate. No rating is prerequisite to attaining any other rating.

The *Intramural rating* qualifies the holder to officiate games in the school in which she is enrolled or games of comparable level.

The *Apprentice rating* qualifies the holder to officiate games which may be adequately controlled by a competent, but inexperienced official.

The *State rating* signifies that the holder is capable of officiating any game within the state where the rating is awarded.

The *National rating* signifies that the holder is capable of officiating any game anywhere in the United States. This rating is for the most highly skilled official.

Specific requirements for all ratings are outlined below.

Intramural Official

1. Minimum standards – Set by Affiliated Board.
2. Duration – two years from next June 1.

Apprentice Official

1. Minimum grades – average of theory and practical, 75.
2. Theoretical examination – national examination, minimum 74.

3. Practical examination – given by at least one State official, minimum 75.
4. Duration – Two years from next June 1.

State Official

1. Minimum grades – average of theory and practical, 80.
2. Theoretical examination – national examination, minimum 76.
3. Practical examination
   a. Practical examination – given by at least three members with a State or National rating, minimum 80.
   b. Alternate plan for basketball or volleyball – after holding a State rating with the same board for four consecutive years, the official may request that seven different coaches evaluate her officiating (see appropriate sports packets for details), in lieu of the practical rating session.
4. Duration – two years from next June 1.
5. This rating is transferable to other Boards.

National Official

1. Minimum grades – average of theory and practical, 85.
2. Theoretical examination – national examination, minimum 82.
3. Practical examinations
   a. Practical examination – given by at least three members with a State or National rating, minimum 85. (At least one of the three must have a National rating.)
   b. Alternate plan for basketball or volleyball – after holding a National rating with the same board for four consecutive years, the official may request that seven different coaches evaluate her officiating (see appropriate sports packets for details), in lieu of the practical rating session.
4. Duration – two years from next June 1.
5. This rating is transferable to other Boards.

Levels of ratings for gymnastics and synchronized swimming are:

	Minimums	
Gymnastics	*Theoretical*	*Practical*
National	90	90
Regional	80	80
State	70	70
Associate	60	60
Apprentice	50	50

Duration: Until December, 1976. Must judge three meets per year or a total of six meets within a two-year period to maintain status.

Synchronized Swimming	*Minimums* *Theoretical*	*Practical*
National	90	85
Regional	80	75
Local	70	65

Fees

These fees are minimum fees recommended by the Executive Board as a guide to Affiliated Boards. These boards may set fees lower or higher than those suggested when the local situation demands an adjustment from the recommended fees. The Intramural and Apprentice fees should be set by each Affiliated Board. The fee for an Apprentice Official should not exceed that for a State Official and should reflect the difference in the level of rating.

Basketball and Softball

National – $12 plus traveling expenses for a single game. If only one official is used, the fee should be $24 plus traveling expenses.

State – $9 plus traveling expenses for a single game. If only one official is used, the fee should be $18 plus traveling expenses.

Badminton and Volleyball

National – $9 plus traveling expenses for a single match. If only one volleyball official is used, the fee should be $18 plus traveling expenses.

State – $7 plus traveling expenses for a single match. If only one volleyball official is used, the fee should be $14 plus traveling expenses.

Gymnastics

National – $10 per session, transportation, and $15 per diem.
Regional – $7.50 per session and transportation.
State – $7.50 per session and transportation.

Swimming. The recommended fees for Nationally rated swimming officials are:

When there are three officials: $6 plus traveling expenses per official for a single meet (whether dual or group); $9 plus traveling expenses per official for meets with first and second teams participating.

When there are fewer than three officials: $9 plus traveling expenses per official for a single meet (whether dual or group); $12 plus traveling expenses per official for meets with first and second teams participating.

Dual meets: Pay referee and starter $15. Turn judge, if paid, $10.

Tennis. In compliance with the United States Lawn Tennis Association policy, no fees will be charged for officiating tennis matches, although travel expenses may be accepted.

Track and Field. It is customary for one official to be paid a minimum of $9 per session (a session shall be defined as a period of time approximately three hours in length) plus traveling expenses. In the case of shorter sessions, fees should be adjusted accordingly. When possible, other officials may be paid.

REGISTRATION OF OFFICIALS

A number of states require those who officiate either boys' or girls' interscholastic contests to be registered with the State High School Athletic Association or other administrative body. Holding a NAGWS rating ordinarily does not exempt an official from complying with this regulation.

All NAGWS officials who officiate any high school or junior high school games are urged to cooperate fully with their state regulatory body by registering with the proper organization and paying any required fee, by wearing the official emblem in addition to the NAGWS emblem, and by complying with all requirements for sports officials.

AMATEUR STANDING OF OFFICIALS[1]

An official who wishes to maintain her amateur status as a participant in a sport must be aware of the ruling(s) on amateur status established by the governing body for that sport.

Amateur status may be defined by groups governing high school and college level competition. National organizations governing amateur competition may also have established rulings on the amateur status of the participant.

The official who wishes to maintain her status as a participant is responsible for investigating the specific regulations of the governing body who has jurisdiction over her eligibility as a participant.

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[1] For more complete details, see *JOHPER* 39:24-27, October 1968.

Amateur Standing in Basketball, Track and Field, and Swimming

According to the Amateur Athletic Union, which has jurisdiction over amateur basketball, track and field, and swimming, any person receiving compensation for officiating in any sport renders herself ineligible for further amateur competition.

An official, without jeopardizing her amateur standing, may request, receive, or accept expenses in connection with her participation in any event which shall not exceed (a) her actual expenditures for travel (eight cents per mile or first class public transportation fare) and (b) her actual expenditures for maintenance up to a non-itemized total of $10 per day.

Amateur Standing in Softball

The Amateur Softball Association has taken the position that umpires who officiate softball games and are paid for their services do not professionalize themselves and are thereby eligible to participate in ASA competition.

Amateur Standing in Volleyball

According to the United States Volleyball Association, volleyball officials may get only transportation, meals, and lodging and may receive no honorarium if they wish to retain their amateur standing.

HOW TO BECOME A RATED OFFICIAL

1. Study the rules, the article on the techniques of officiating, and the study questions.
2. Attend interpretations meetings, and officiating clinics or training courses conducted in your vicinity.
3. Practice often. To some, officiating comes easily; to others it comes only as the result of hard work and concentration. Welcome criticism and work hard to improve.
4. Find out from the chairman of the nearest affiliated or provisional board when examinations for ratings are to be held. (Consult list of boards.)
5. Contact the chairman of the nearest affiliated or provisional board for materials necessary to give Intramural ratings.
6. Remember that it is the aim of the Officiating Services Area to maintain a high standard for National officials. Do not be discouraged if you do not receive a State or National rating on your first attempt. Welcome suggestions from the examiners, practice more, and try again.

INFORMATION FOR AFFILIATED AND PROVISIONAL BOARDS

An *affiliated* board is a board which has at least three State officials in a given sport; it is authorized to give ratings at all levels in that sport.

A *provisional* board is a board which has at least three Apprentice officials in a given sport; it is authorized to give ratings at the Intramural and Apprentice levels in that sport.

Exceptions: When OSA rating films are used as a medium for the practical rating (synchronized swimming and gymnastics), boards may award ratings at any level.

An Officiating Board may have *affiliated* status in one or more sports and/or *provisional* status in one or more sports. When a Board has *affiliated* or *provisional* status in a sport and wishes to have affiliated and/or provisional status in another sport, that board should write the Examinations and Ratings (E.&R.) Chairman of the respective sport. The board should indicate the names of a minimum of three persons qualified to act as examiners in that sport for the next two years. Qualifications and experience in the sport should be listed for each examiner.

NOTE: For basketball and volleyball an examining committee of three State officials is required. No specific number of rated officials is needed to initiate ratings in Badminton, Gymnastics, Softball, Swimming, Synchronized Swimming, Tennis, and Track and Field.

If, after two years, a board does not have three State officials in a sport, the board loses its affiliated status for giving ratings in that sport. (Exceptions: gymnastics and synchronized swimming). The board may then request provisional status in that sport from the E.&R. Sports Chairman. If granted, the board may continue to exist with provisional status and award only Apprentice and Intramural ratings. To continue as a provisional board after two years the board must have a minimum of three officials with at least an Apprentice rating in each sport concerned.

Examination packets are mailed to qualified boards on:

August 1 – Volleyball and Basketball
September 15 – Swimming, Badminton, Tennis
October 15 – Synchronized Swimming, Gymnastics
February 1 – Softball and Track and Field

Emblem and Uniform

The emblem for National officials in all sports consists of a shield. Other emblems are available for State, Apprentice, and Intramural officials.

The official shirt for badminton, basketball, fencing, swimming, tennis, track and field, and volleyball is a navy blue and white striped tailored shirt or a navy blue and white striped jersey. The shirt for softball shall be navy blue. A navy blue skirt, shorts or slacks appropriate for the activity should be worn with the shirt. In badminton, fencing, swimming and tennis white may be substituted for the navy blue. A navy blue blazer may complete the uniform if desired. Officials who receive fees for officiating are required to wear the official shirt.

The official shirts and emblems are available from The Hanold Company, Sebago Lake, Maine 04075. The company can also provide approved blazers. When ordering, send dress size and check or money order for correct amount. Anyone may order the official shirt. A current rating card must accompany an individual's order for an emblem; however, it is not necessary to send a rating card when ordering a shirt.

An affiliated board may wish to have a supply of shirts or emblems for distribution to newly rated officials. A quantity order may be placed *only* by the affiliated board chairman. It is not necessary that the chairman enclose her own rating card, but full payment must accompany the order.

Prices: Wash-and-wear shirt $5.50; knit jersey with zipper neck, $8.50; knit jersey with button neck $12.00; doeskin blazer, $28.00; National emblem, $1.75; State, Apprentice, and Intramural emblems, $1.

Shipping Charge: 75 cents per order.

HOW TO ESTABLISH A BOARD OF OFFICIALS

1. Establish the need for an affiliated board by contacting women in the area who have current ratings or who are interested in standardizing and raising the level of officiating badminton, basketball, gymnastics, softball, swimming, tennis, track and field, or volleyball in that area.
2. Write to the Officiating Services Area Secretary, listed in the Officiating Services Area section of this *Guide*, for a sample copy of an authorized constitution for officials' boards and the *Policies and Procedures Handbook* and application for becoming an affiliated board.
3. At a designated meeting of interested women, present plans for forming a board.
   a. Choose a name which will permit expansion of function as need may arise; do not limit title to one sport.
   b. From the group, elect a chairman, chairman-elect, secretary, and treasurer.

c. Form an examining committee of at least three members. If any member has been rated elsewhere, her experience should be helpful; such a rating is not necessary, however, except in basketball and volleyball. (See 4 below.) It is suggested that members of the examining committee be examined and obtain ratings from other affiliated boards whenever possible.

d. Make plans for drawing up a constitution according to the sample copy received from the Officiating Services Area. Plan to devote some time to the study of the rules and to practice officiating. If possible, secure the assistance of some rated official in each sport for which the Board anticipates giving ratings.

4. Send to the Officiating Services Secretary the completed application form, two copies of the local constitution, and a check for $5 annual dues (made payable to the Officiating Services Area). If *basketball or volleyball* ratings are to be given, an affiliated board must send a list of three State or National officials, and a provisional board must send a list of three officials with at least an Apprentice rating. A list of three interested women must be sent if the board wishes to give ratings in sports other than basketball or volleyball. If a board wishes continued affiliation in any sport, at the end of two years, an affiliated board will be required to have at least three State or National officials; a provisional board will be required to have at least three officials with at least an Apprentice rating. Approval of the application will come from the Officiating Services Area Chairman who will request that examination packets be sent to your Affiliated Board Chairman for all sports in which your Board is authorited to give ratings. The process of accepting an application for affiliation of a new Board and of requesting that the proper examination packets be sent ordinarily takes several weeks. Prospective Boards, therefore, should file for affiliation at least a month before they wish to hold rating sessions.

5. Administer Form A of the National Theoretical Examination. Form B of the National Theoretical Examination may be administered to those who did not pass Form A.

6. To cover expenses involved in the construction and evaluation of written examinations, boards should charge a fee each time an individual takes an OSA written examination.
The OSA Treasurer should receive 50 cents for each written examination given by a board. Board fees can exceed 50 cents per test in order to cover operating expenses.

7. Conduct practice sessions in rating officials. All persons on the examining committee who have not previously rated officials should have a minimum of three practice sessions prior to actually rating. Secure the assistance of a rated official in these practice sessions if at all possible.
8. Give practical examinations to individuals who pass the written examination. These should be conducted by three members of the examining committee.
9. Request appropriate rating cards from the OSA Secretary for distribution to those who pass the theoretical and practical examination.
10. Send lists of approved officials to schools and other organizations in the area. This notice should indicate the fees for officiating in accordance with the OSA policy and should give the name, address, rating, and telephone number of each official.
11. Keep accurate lists of all persons receiving ratings. Forward these lists to the chairmen of the Examinations and Ratings Committees in those sports in which your Board was authorized to give ratings.

NAGWS BADMINTON COMMITTEE
1972-1974

Doris E. Henderson, *Chairman*, Illinois State Univ., Normal 61761
Colleen George, *Past Chairman*, North Texas State Univ., Denton 76203
Sheran L. Benerth, Ben Eielson High School, Eielson AFB, AK 98737
Georganna S. Cottman, Easton Middle School, Easton, MD 21601
Ruth Ann Christianson, Agassiz Elementary School, 510 W. 38th St., Minneapolis, MN 55409
Carol Monroe, Marietta College, Marietta, OH 45750
Dixie Lee Stahr, Indiana State Univ., Terre Haute 47809
Martha Stephens, Wisconsin State Univ., LaCrosse 54601
Jane E. Tarring, Metcalf Middle School, Exeter, RI 02822
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The Face of the Net-Hammer Grip Syndrome! Can It Be Broken?

MARY ANN RYDER

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One of badminton teachers' most frustrating problems is helping beginners overcome or prevent the face-the-net body position, the hammer grip and the half overhead swing which are so common among inexperienced players. Most of us, unfortunately, are only too familiar with the phenomenon depicted in Figure 1. Although these grip and body positions are sometimes used by experts, particularly when playing in the net area, these body mechanics are very inefficient for strokes made from the back court or for effective court coverage.

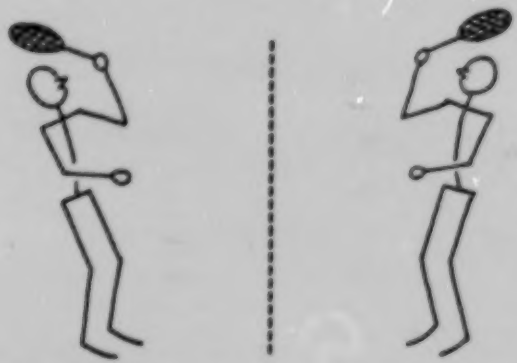

Figure 1. Hammer grip – face the net position (to be avoided).

The face-the-net position when used in the back court usually results in the player hitting while moving backwards, which inhibits both the production of power and the player's ability to cover the court. The more efficient body position with the side to the net, particularly when hitting from the back court, utilizes trunk rotation and the transfer of weight toward the net. It is primarily these two components – trunk rotation and weight transfer – which facilitate the generation of power and the player's ability to get back to the center of the court and thus ready for the next shot.

Since the side-to-the-net body position is so essential to effective stroke production and court coverage, the teacher's job is to design practices in which this correct position can develop. It is not enough merely to tell a player to assume the proper grip and body position; she must be placed in situations which require their use.

To elaborate, it is natural for a player to turn her body if she has to move for a bird at medium or low height and definitely to her right or left. A player does not naturally turn her body to hit a bird coming *to her* over her head; consequently, the practices should call for the player to hit a bird which has been hit to her right or left and at medium height.

Because of these factors, the writer advocates development of the proper grip and body position with the side arm and underhand swing before the overhead pattern is developed. Since the grip and body position are essentially the same for both patterns, the students will have a foundation upon which to build good overhead shots.

Grip – Body Position – Arm Swing

A brief description of the appropriate grip, body position and arm swing follows. Only the key points have been stressed for brevity's sake. The writer suggests that an additional badminton reference be consulted for a more complete description of these elements.

Grip. The appropriate *forehand grip* is similar to the forehand grip in tennis (i.e., a hand shaking grip with the V formed by the thumb and forefinger in line with the racket frame). The proper grip can be distinguished from the hammer grip by noting the location of the V: in the hammer grip the V formed by the thumb and forefinger is in line with the face of the racket, not with the frame. The proper *backhand grip* usually recommended for beginners is the one in which the thumb extends straight up the back of the racket handle.

Body Position. The desirable body position includes turning the body so the shoulder and whole side of the body are toward the net when executing the shot. The shoulder and side opposite the racket

hand are toward the net when hitting forehand shots, and the same shoulder and side are toward the net when hitting backhand shots.

Arm Swing. The appropriate overhead swing pattern is similar to those in the tennis serve and smash. The underhand and side arm swings are also similar to those used in tennis, the main difference being in the action of the wrist.

Practices to Develop the Grip, Body Position and Arm Swing Pattern

In all the following practices the teacher should stress: proper grip, body position, footwork and appropriate arm swing as described; keeping the bird at medium height or below the shoulder so that the player *must* use a side arm or underhand swing pattern; and avoid getting the bird high into the space over the player's head.

Pantomime Practice (Figure 2)

1. Demonstrate the forehand grip, body position and underhand and/or sidearm swing pattern while standing on the forehand side

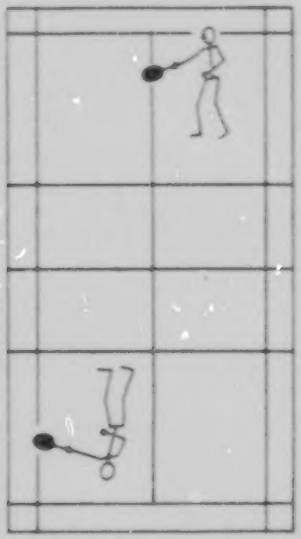

Figure 2. Pantomime practice.

of a line, far enough away so the *racket head is being swung over the line*.

2. Have the students stand on the forehand side of any line which runs perpendicular to the net (sideline, alley line, center line). Be sure they have enough room to swing safely. Try the swing, then do the same for the backhand.

Alley Rally (Figure 3)

1. Have students work in partners. The object is to rally the bird in the alley at low or medium height. Start again if the bird gets too high.
2. Stand directly opposite each other near the alley about midway between the net and base line. One player will be hitting forehands, one backhands. Have the forehand player start the bird.
3. Stand far enough from alley so racket head is swinging over alley.

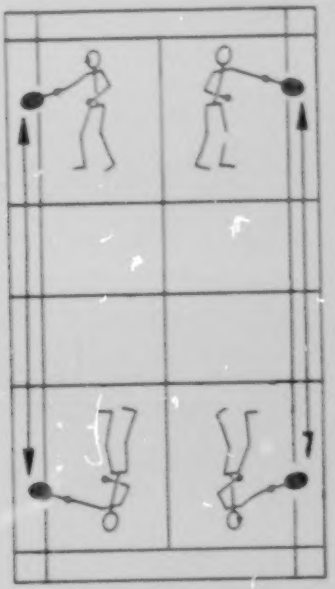

Figure 3. Alley rally.

4. Distance is from mid-court to mid-court to begin with. Eventually try from front court to front court and back court to back court.
5. Have partners change sides of net so both experience hitting forehands and backhands.

Ready Position to Alley Rally

1. After students are proficient with alley rally as described, have them move from a game ready position near the alley to make the stroke. The ready position includes feet in a side stride, body facing the net, knees slightly bent, weight on the balls of the feet and racket up. Have them assume the ready position after every shot.
2. To make it more challenging and game-like, have them assume the ready position near the center line, which really forces them to move every time for the bird.

Cross-Court Rally (Figure 4)

1. Partners stand near the alley behind short service line diagonally opposite each other. The object is to rally the bird cross-court

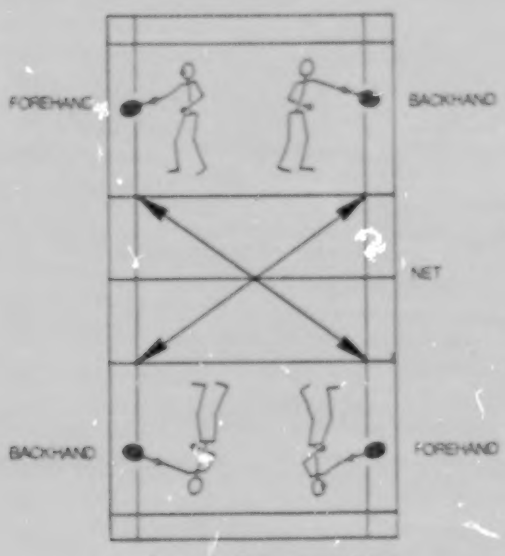

Figure 4. Cross-court rally.

at low or medium height. Partners will be hitting forehand to forehand or backhand to backhand if all are right-handers. Be sure they experience both forehands and backhands.

2. Rally across court from the area in alley where short service line and sidelines intersect to a comparable area diagonally across net. Emphasize getting the bird to this area which is in front of the partner. Don't tell them to hit to their partner.
3. The body position is slightly open. The shoulder is not as square to the net as when one is hitting down the line (as in alley rally). The shoulder is toward the target area and therefore more diagonal to the net than perpendicular.
4. Eventually try hitting from mid-court to mid-court and back court to back court.

Ready Position to Cross-Court Rally
Assume the ready position near the center of the court and move to the bird each time.

Combination Cross-Court and Down-the-Line Rally (Figure 5)

1. Partners start near the alley as in alley rally.

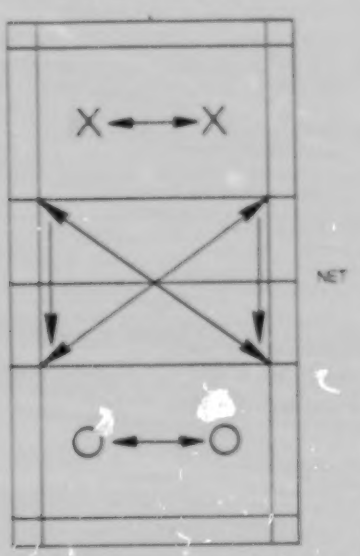

Figure 5. Combination cross-court and down the line rally.

2. One partner starts the bird (usually the forehand person) and hits down the line (straight across the net to a space near her partner as in alley rally). The partner hits cross-court as in cross-court rally. The first person runs across and returns the bird down the line as her partner runs across the court and hits cross-court, and so on.

   Note: One person is always hitting down the line while the other is always hitting cross-court.
3. Stress that the shoulder and side are square to the net (toward the target) on down the line shots and are more open, with the shoulder and side pointed diagonally toward the target, on cross-court shots.
4. Switch so that partners get experience with both down the line and cross-court shots.
5. This is a more difficult practice but if medium distance and medium height shots are stressed most beginners will be able to achieve a minimum level of success after only a couple of tries.
6. Practice from the net area, mid-court area and back court.

Modified Game – Center Court Out of Bounds (Figure 6)

Four players take a court. Each team plays up and back (the court is divided in two from the net to the base line). Since short, medium and long shots and cross-court and down-the-line shots have been practiced, and players have hit soft, medium and hard, they are well equipped to play a game in which the *center is out.* All rules are the same as in a regular doubles game, with the exception that a bird landing in the center area is considered out.

Advantages of the Preceding Techniques

1. It is assumed that if the students develop a good grip and body position for the sidearm and underhand strokes then they will have basis upon which to build a good overhead swing pattern, especially since the grip and body position are essentially the same.
2. By encouraging the players to hit a target (the alley or the center court space in front of their partner) and having them hit from net area to net area, mid-court and mid-court and back court to back court, they should develop behaviors that will be used during game play.
3. By stressing the medium height of the bird and the target area it is possible for the learner to make the desired response (i.e., a good sidearm or underhand stroke). It is almost impossible or at

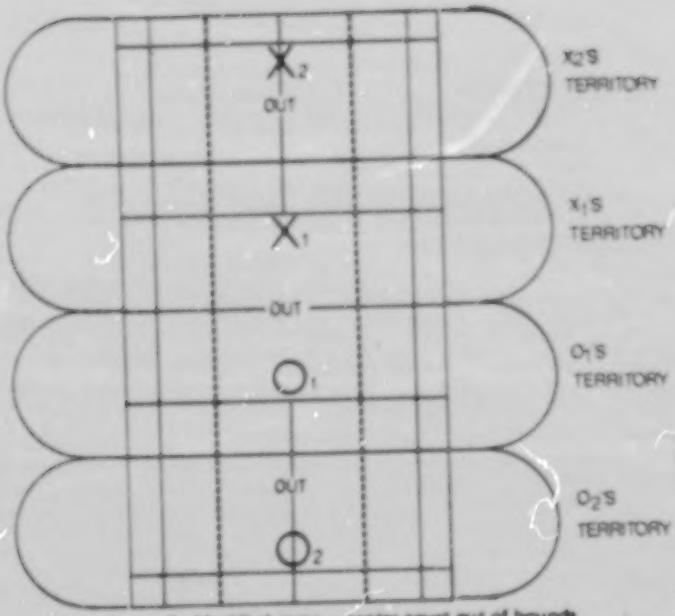

Figure 6. Modified game – center court out of bounds.

least very awkward to face the net and use a hammer grip to hit a bird that is at medium height and to one's side.

4. By referring to the person each player works with as a partner, not an opponent, students begin to realize that successful stroke development depends on each player's ability to hit the bird to a target area at a particular height. (In this day and age when young people are concerned about cooperative rather than competitive behavior this may be an important point to stress. Another point to consider is that during the game the player across the net is an opponent and the object is no longer to hit the bird so it can be returned.)
5. Using this approach, the beginner learns that she can hit the bird underhand, sidearm and eventually overhead; she can hit soft, medium or hard; and she can hit the bird so that it goes right or left, long or short. This should lay the groundwork for more specific instruction in particular shots (e.g., net drops, drives)

without all the details and terminology that often cause confusion for the beginner.

6. It is suggested that games and modified games other than the one mentioned should be played from the beginning of the unit. The practices probably should never take more than 10 to 15 minutes of the class period, with the rest of the time devoted to a competitive situation.

Using the approach described, beginners should develop good stroke production. The face the net-hammer grip syndrome can be overcome!

Mechanics as a Basis for Instruction

TOM PAUL
FRANK RAMSEY

Tom Paul and Frank Ramsey are on the physical education staff at Georgia Southern College, Statesboro. Each received his doctorate at Florida State University, Tallahassee. Both teach service and methods courses in badminton and are regional champions in singles and doubles.

The application of principles of mechanics to teaching and playing badminton can help the instructor explain why certain techniques are used and know where emphasis in teaching should be placed. The student gains a better understanding of the game and the techniques and consequently becomes more capable of correcting her own mistakes.

Leverage

The player should make every effort to position herself so that she hits the shuttle with a full arm extension whenever maximum force is desired. This extended arm position assures the greatest possible lever length, which results in greatest potential racket head speed. Application of this principle is especially important in executing the overhead smash, overhead clear and high clear serve.

Force

Velocity studies using stroboscopic techniques show great differences in racket speed with and without wrist snap. The calculated racket head speed of the average player using wrist snap is close to 8[illegible] miles per hour; however, it moves only about 20 miles per hour when the wrist is not used. Thus it can be seen that the force of the wrist snap moves the racket more than four times faster than without it and enables the beginning player to generate the force necessary to clear the shuttle deep.

The wrist snap is the final force applied to the racket, but the arm and trunk are preceding forces. The shuttle should be positioned in front of the player to allow trunk flexion to occur when hitting the overhead clear or smash. The position of the shuttle is very important, because it allows correct application of the forces.

The drop shot requires a decrease in racket speed. It is desirable to execute this shot in a deceptive manner. Since the wrist snap is the final force, racket speed can be decreased only by decreasing wrist snap; arm and trunk action should be maintained for deception. Cut shots accomplish this by changing the direction of force. The force is applied off the center of gravity of the shuttle, resulting in a spin of the shuttle and less force transferred to it.

The same principle applies to the "tumble" shot, in which the racket is sliced under the shuttle in a pushing fashion, causing it to follow a very short trajectory and drop close to the net. Around-the-head shots are another use of direction of force. If the shot is hit with the right foot back, as it is often executed, the shuttle will be positioned to the left of the base of support. By switching to the left foot, the base of support is behind the line for force, preventing an opposite reaction which would reduce the force applied to the shuttle. This insures maximum flexion of the trunk and an effective return to a defensive position in the middle of the court. For the same reason, a player should never leave the floor to hit a shot.

Aerodynamics

The shuttlecock is designed to produce air resistance to reduce its speed. Because of the air resistance, the shuttle decelerates rapidly even after a smash. The longer it is in the air, the slower the velocity; thus, a smash hit from deep in the court can usually be easily returned. A drop shot from deep in the court hit with fairly good initial velocity will be moving slowly when it reaches the net. A common error for beginners is to hit drop shots too softly, which requires a higher trajectory.

When shuttles become damaged, there is usually an increase in speed because of loss of feathers or plastic. However, the opposite effect takes place when the supports of a plastic shuttle are broken – the shuttle speed is decreased.

The normal spin of the shuttle causes it to hold its position in flight. Sometimes a wood shot may result in a "dead" shuttle which moves in an unusual flight pattern.

An effort should be made by instructors to check shuttles periodically for damage. Because damage affects the aerodynamics of the shuttle, this type of practice may be a detriment to the development of a good "touch."

Stored Counterforce

The tension of the strings and the construction of the racket are important in developing maximum force and "touch." The strings are usually gut or nylon and have a tension of approximately 10-13

pounds as measured by the strain gauge of a stringing machine. The mechanical factor to remember is that as the strings lose their tension they trade force for distance, and it becomes more difficult for the beginner to keep the shuttle deep.

The racket material varies from wood to stainless steel and, of course, varies in price. The best type mechanically is the stainless steel, because it is lightweight and possesses great strength. The whip or bend in the shaft increases the force, and the light weight enables the player to develop greater velocity and thus greater kinetic energy. This results in maximum efficiency in executing shots.

Conclusion

Improvement in athletic performance has resulted from increased knowledge of the basic underlying mechanical principles. The instructor who utilizes this knowledge in her approach to teaching is relying on a sound scientific basis for her methods, which ultimately can result in championship badminton.

Court Coverage in Singles

DONNA CLELAND

Donna Cleland received her B.S. degree in physical education from Baylor University, Waco, Texas, and her M.S. and Ed.D. degrees from the University of Tennessee, Knoxville. She has had competitive, instructional and coaching experience in badminton and is currently an assistant professor at the University of Mississippi, University.

A fundamental consideration in the execution of effective badminton shots is proper positioning of the player in relation to the approaching bird. The majority of shots are not actually mechanically difficult to execute, that is, assuming the player is behind the bird prior to initiation of his strokes. A basic difficulty in stroking experienced by players of all levels of ability is poor alignment in relation to oncoming shots. The player simply is not situated correctly because she has not moved soon enough, far enough or efficiently enough. The examples are familiar: an overhead clear contacted behind the body drops far short of its target, a smash contacted behind the body has little downward trajectory, and an overhead drop falls into the net. Any number of other shots are either out of reach completely, or, if contacted at all, are inaccurate.

If improper positioning at the moment of contact is a basic detriment to effective stroking, the importance of footwork is obvious. In general, court coverage is what badminton is all about, and proper footwork enables the player to cover the entire court as efficiently as possible.

Ready Position

Often players are unable to align themselves properly with oncoming deep shots because they do not begin their movements soon enough. They eigher fail to get behind the bird or arrive after the bird has dropped below its optimal point of contact. Such situations suggest the possibility of an incorrect ready position which prevents quick starts. Since most players move forward more easily than backward, the base or ready position should be slightly behind the center of the court. Feet should be parallel and far enough apart to maintain balance, with the weight evenly distributed on the balls of the feet. The knees should be slightly flexed, the racket head up at about shoulder height. Extreme alertness is a key factor. Players should also remember the fundamental importance of

reassuming a ready position immediately upon completion of a shot. Although strokes should not be hurried, there is no time in badminton for sustained follow-through. Movement is virtually continuous.

Getting Set for the Shot

A movement error that especially inhibits cleanly executed overhead shots is stopping and getting set for a return before arriving at a point well behind the bird. Many players could improve their strokes significantly by exerting a little extra effort and taking that last critical step which would place them well behind deep shots. Furthermore, an extremely important point to remember is that the last step should always be taken with the racket foot. Since players of almost any level of ability can make a return that is some semblance of their intended shot, frequently the temptation is great to conserve energy by stopping short of the ideal court position or ideal foot position. Such is particularly the case with beginners, who often find just hitting the bird sufficiently satisfying. However, players who are willing to invest one more step in the execution of a stroke are the ones whose rackets are most likely to generate the crisp pop or snap characteristic of cleanly executed shots. Since few women possess adequate forearm strength to "pull" an accurate power shot from behind the body, proper wrist action and forearm rotation are severely inhibited when the individual is poorly aligned with an approaching bird. Players who seem to lack accuracy, power and efficiency should analyze their hitting position in relation to the bird as carefully as they analyze their mechanics of execution.

Footwork Patterns

A third and inclusive cause of poor court coverage and subsequent weak shots is basically incorrect footwork. Most often players assume the correct ready stance, react reasonably quickly from their base positions and are energetic and perfectly willing to move. In spite of this, court coverage seems to be elusive. Court coverage requires a rather exact pattern of footwork. It is neither a random skill nor a corollary of pure speed. It is a specific component of the game which must be learned and practiced.

There are six basic areas on the court which require specific footwork patterns for coverage: 1) left front, 2) right front, 3) left center, 4) right center, 5) left back and 6) right back. The player must be able to move to and from each of those areas, making her shot in the interim. A description of the correct footwork pattern for covering these areas is given below. All movements apply to a right-handed player.

Left Front. When moving to the left front of the court, the initial motion is a slight pivot on the left foot, accompanied by a cross-over step with the right foot so that the player is now headed in the direction of the oncoming bird (Figure 1). Depending on how far away the bird is, the second step may be either a long step with the left foot or a shuffle step, in which case the left foot closes in behind the right. The last step should always be taken with the right foot, and the player's body should be well extended in the direction of the shot. To return to the base position, the player transfers her weight to her back foot and back pedals until she reaches the center of the court.

Right Front. Movement to and from the right front of the court is similar to movement to and from the left, except the line of movement is to the right. The first motion is a step with the right foot in the direction of the shot (Figure 2). The next step may be a long step with the left foot or a shuffle step, followed by the final step with the right foot. The player should stretch to reach the bird, and thereafter back pedal to the center of the court.

Figure 1. Left front.

Figure 2. Right front.

Left Center. When moving directly to her left, the player initially pivots left with the left foot and simultaneously crosses over with her right foot, extending her body toward the left sideline (Figure 3). Taller players can reach some shots with no further movement; however, an additional shuffle step, followed by the final step with the right foot, is usually required for added distance. To recover, the player should back pedal to the center of the court.

Right Center. Movement directly to the right is initiated with a step in that direction on the right foot. Simultaneously the player should turn to face the right sideline (Figure 4). Next the left foot closes in behind the right, and the last step is a long one with the right foot. After the shot is made, the player should again back pedal quickly to her base position.

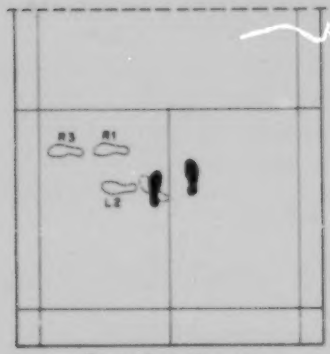

Figure 3. Left center.

Figure 4. Right center.

Left Back. Movement to the left back of the court requires an initial 180° pivot on the right foot, accompanied by a little step toward the center of the baseline with the left foot, left toes pointing toward the back of the court (Figure 5). This is done to point the left side toward the back left corner of the court. The second step, with the right foot, is also toward the back left of the court. Now the player's back is to the net, and she is carefully watching the approaching bird over her right shoulder. The third step is with the left foot, also in a diagonal direction toward the back left of the court. The last step with the right foot should position the player well behind the oncoming bird. Again the player's body should be well extended. After the shot has been made, the player should shift her weight to her left foot, take a step backwards toward the center of the court with her right foot, then pivot and return to her base position with a series of forward steps.

Right Back. Movement to the right back of the court is initiated with a pivot to the right accompanied by a step in the direction of the oncoming bird with the right foot, toes pointing toward the right sideline (Figure 6). The right shoulder should now be pointing

toward the back right of the court. Next, the left foot is drawn close to the right foot. This pattern of shuffle stepping is repeated a time or two until the player is behind the bird and the right foot is extended. The player should return to the center of the court with a series of brisk forward steps.

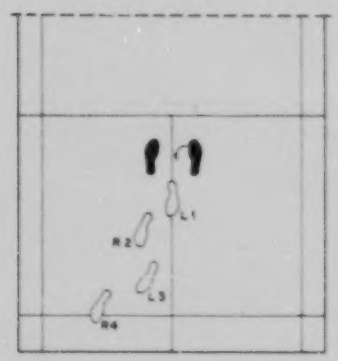

Figure 5. Left back.

Figure 6. Right back.

A common mistake in covering the back court area is back pedaling to reach the bird. Balance and control are difficult to maintain while back pedaling, and speed and efficiency are reduced. Furthermore, failure to pivot initially prevents the player from positioning her body correctly for the ensuing shot; that is, she arrives at her destination without having turned her side to the net. To cover the back court area efficiently, one must learn to pivot and shuffle step toward the approaching bird.

The Backhand Strokes

KEITH SPENCER

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No stroke is the source of as much anguish as the backhand. In fact, so widespread is the reputation of this shot that "playing the backhand" has become an elementary court strategy. Players are often tempted to compensate for poor backhands by inventing any number of weird and wonderful grips or by camping on the left hand side of the court in hope of avoiding backhands altogether. Both these reactions are negative ones and leave the player vulnerable in other areas. By beginning with basics, the backhand can be readily developed to the point where the opponent can be attacked from the left side of the court as easily as from the right.

It is essential that technique be given greater emphasis than simple execution. The beginner using a "fly-swatter" grip may successfully hammer some shuttles over the net, but is on a dead end course. A correct grip is crucial: the index finger and thumb should form a V which points toward the left shoulder. The grip must be checked constantly, for the tendency is to sneak either the thumb or the index finger to the top of the handle and to push rather than stroke the backhand shot. A sure sign of a grip gone wrong is stroking the shuttle palm first, and it is impossible to hit with power from this position.

Once the grip is mastered, the next step is to ensure that the player is turned sideways to the net with the feet comfortably spread. Easy, waist-high shots should be attempted and the shuttle should be met slightly in front of and well away from the body. Emphasis should be placed on striking the shuttle slowly and easily for the tendency is to hit for power rather than develop consistency.

A correct, *relaxed* grip allows for the strong wrist action essential to hitting good backhand shots. Constant practice develops a grooved pattern with balance, timing, a strong wrist snap and follow-through. The following faults are characteristic of backhands:

1. Failure to use the wrist, usually resulting from an incorrect grip
2. Failure to turn sideways to net

3. Failure to have the arm fully extended, thus hitting the bird when it is too close to the body.

What to do when the shuttle is hit high down the left side of the court is the source of considerable debate. Many world-class European players have perfected powerful wrist-action backhand clears and can also smash and drop from this position. The high backhand clear is hit with the back turned to the net, elbow up, and the bird is met slightly behind the body. The stroke involves very little backswing and no follow-through so that power is generated almost completely from the wrist area.

An alternative to the backhand clear is the round-the-head stroke, which has the advantage of allowing the player to return shuttles hit down the left side of the court while she is still facing the net. The left leg must be placed well to the left side so that balance can be maintained and the shuttle is struck above the left shoulder rather than above the head as in the other overhead strokes.

The round-the-head shot, when mastered, can be a good offensive stroke and is often used to cut off clears hit cross-court. Clears, drops and smashes can be hit from this position and are particularly effective when used to change the flight direction of the shuttle; the hitting is behind the opponent as she moves to center court.

The backhand clear position also lends itself to a number of effective stroke variations, but a general rule of thumb is to play overheads rather than backhands. In this manner the most dangerous court position is maintained. The average player will find herself being frequently pressured on her backhand side. If she has begun with the correct basics she should find herself able not only to defend but also to attack from this position.

Strategy in Singles Play

J. FRANK DEVLIN

Frank Devlin is a former All-England World Champion in singles, doubles and mixed doubles. He has taught badminton for many years and is the author of several badminton books and articles.

The Serve

Of first importance in singles play is the mastery of a really good high service using the full length of the court. By delivering a good length serve you at once put yourself on even terms with your opponent. Unless she has a phenomenally hard smash and is able to place it within an inch or two of the side-lines, she will be unable to make an outright winner. Even if she does attempt to do so, the effort entailed is too great for her to be able to continue this form of reply for very long. In singles play, a good length serve has two great attributes: it is an absolutely safe way to open the game, and it is a difficult shot for the opponent to return, for it requires accurate timing to hit a perpendicularly falling shuttle and stamina to continue to do so. For her to be able to play a deep clearing shot off your good length serve requires power and is very tiring in a long match. If she plays a drop shot, the farther back in the court she is the more difficult it is for her to be accurate and the easier it is for you to see where she is going to place it.

As a general rule in singles play, serve a large percentage of high serves. However, variation is necessary to stop your opponent from taking up a position which enables her to deal with a serve fairly comfortably, which she will do if you consistently use the same type of serve. Therefore, if your opponent is standing very far back in the court, serve short. It will be an extra effort for her to come in towards the net, and possible she will arrive only in time to play an underhand shot. If she is standing too far over to one side of the court, serve to the vacant spot. Always take any advantage your opponent may give you by uncovering any of her court. A quick flick played straight at your opponent's chest can be a quite useful form of serve, but it should be used sparingly unless it happens to be scoring every time. Play it with an action as similar as possible to your other serves, for its value lies in the unexpected rapidity of its arrival which leaves your opponent very little time to get her body out of the way.

Returning the Serve

The best and safest return to the high serve (assuming it to be of good length) is a high clear. The drop shot, unless very deceptively produced, gives the server, who should be standing much closer to the net than is the receiver, an option to play a net shot or a flick to the back of the court. The smash should never be used off a good length serve, except perhaps at the beginning of a game to find out if your opponent has a very weak defense. The best target for a high clear off the serve is probably to your opponent's backhand corner which, unless overdone, is more likely to produce a less offensive return. If you play a drop shot off the serve, one to your opponent's forehand corner is the most difficult for her to return, for it is more difficult to eliminate the body for forehand shots, whereas on the backhand it is easier to stretch out and play the shot well in front of the body. Here again variation is essential; vary your clears, drop all along the net, and so prevent your opponent from being too successful in her anticipation.

The safest reply to a low serve is a high lob to the back of the court. Always try to take a low serve as near the level of the tape as possible since this gives you command of the whole court for either a net shot, a flicked clear or a low pushed shot deep into the court and near the sideline. Never rush a short serve, or any short shot for that matter, unless you are quite confident of scoring an ace. If your opponent reaches the shuttle, she will be able to clear it over you or push it back at an awkward angle, which will find you well out of position.

There are three ways to return the flick service delivered at your body. You will have no time for a preliminary swing and must advance to meet the shuttle and clear it high to the back of the court using primarily wrist and forearm and a certain amount of momentum from your moving body. If you wait for the shuttle to come to you, it will have to be played as a net shot, which is what the server is hoping for. Another alternative is to take a step backwards and sideways, which allows a certain amount of time to make the swing, and by striking the shuttle late and low, a drop or a clear may be produced.

Stroking Strategy

A clear is very often used in singles play but to be of any value it must have a high trajectory, so that it cannot be intercepted, and it must fall within a few inches of the back of the court. It has two principal merits: it allows time for the striker to return to her base, and it forces the opponent to play at a great distance from the net. A clear is not always a defensive shot but may become an attacking

one when played at the right time. When your opponent is on the run and drawn into the net, at the last moment clear the bird over her head. This is the time to play a fairly low clear so that she will not have time to run back and play anything but a weak shot in reply.

Try to use the sidelines as much as possible, driving down either side and smashing accurately near the sidelines. Remember it is less tiring and more accurate to smash with a little less speed. Practice for accuracy first and actual speed second and when you can combine the two you will score many points. For an outright winner the cross-court smash is best since it is the most difficult shot for your opponent to return. If she does reach it, her best reply is a short drop just over the net into the corner farthest away from the point from which you hit your smash. If your smash has been a hard one, you may be off balance. In singles play, a smash or drop should only be played when you feel you are in a position to reach any reply with comfort.

A good working basis for singles play is to clear and drop alternately and to use drives and smashes only as the openings occur. Make dropping and clearing the basis of your game since clearing to within a few inches of the back line places a heavy strain on your opponent. Use the cross-court drive only when you are sure your opponent is out of position for if she can intercept it early in its flight, her reply is almost bound to be a quick shot which will place you in difficulties. The value of an angled shot is the angle at which it travels away from your opponent, but, if intercepted, she gets the benefit of your angle and is presented with the attack.

Net shots, both cross-court and straight, should be used sparingly in singles play since you can rarely "sit on" a return net shot unless it has been hit too high. Never use the cross-court net shot unless your opponent is out of position, for if she can reach it in time to take it high up on the tape, she can place you in difficulties with either a quick "dunk" or a flick down the side line.

Another useful shot is one best described as the "half-smash," played when a hard smash would leave you off balance and/or a drop shot is too great a risk. A considerable amount of wrist and forearm is used in this shot, which falls quickly in an acute angle near the net. The shot should be placed near the middle of the court since its chief merit lies not in its accuracy but in its deceptiveness. It is not generally an outright winner but very often leads to one.

One of the most frequent mistakes is that of not getting back into position quickly enough after each shot. An arbitrary spot should be picked on the middle line, a little nearer to the net than to the baseline, and this is the "base" to which you should return after each stroke. Half the battle is to play the shot which will leave you

on balance so that you can very quickly return to your base, i.e., one which will leave you moving in the desired direction and which will allow you time to return there.

Two strokes of inestimable value are the backhand overhead drop and the backhand overhead clear, taken at the extreme limit of your reach. Mastery of these strokes means that often you are able to intercept a shot early in its flight and therefore do less running than the player who runs around the clear on her backhand. By playing it early you are not forced to the very back of the court.

Quickness in spotting any weakness in your opponent's game will save you many points, but be careful not to continue to press too frequently on what started as a weakness, because with the practice you provide, your opponent can strengthen this weakness into a comfortable shot. Another point worth remembering is to avoid bombarding a weakness without first drawing your opponent off guard. A shot deep on her forehand will uncover the backhand, and a shot to the back of the court will uncover the net.

Lastly, never indulge in fancy shots unless you are absolutely *in extremis* and anything which is likely to help you is valuable. Occasional successful deception without the ability to sustain a straightforward rally may score a point now and then, but it will never get you anywhere. Deception should be built up by making preliminary actions alike whenever possible and by making full use of the wrist for controlling and altering the direction of your strokes.

At the beginning of a match, even after the extended warm-up in which so many players indulge, it is a great mistake to imagine that you can start off with perfect placements to within an inch or two of the sidelines; allow yourself a fairly wide margin of error. Play well within the court and then spread outwards to the lines as your eye gets attuned. On the other hand, with high serves and clears it is better to risk a few going out at the back of the court and then work back inside the line than to start with a shorter length. Even the best players find it difficult to tell when their length is short, and it is very easy to come off the court with the impression that your opponent has been dropping and smashing extremely well, only to be told that your high serves and clears were well on the short side and making it easy for her to win points.

Mass Badminton

BEA MASSMAN
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Badminton could be utilized in many more physical education classes if it were played as a team game. The following are variations of game forms that can be adopted for class use and in which many students can participate in a short time.

Rotation. This is a formation for practicing strokes and keeping many players active. The players should line up on either side of the net with possibly four on each side and players in between the courts. Each tries to hit ten clears back and forth across the net. Play is stopped and players are told to leave the shuttle on the floor and move in a clockwise direction to the next player. Extra players move in from the sidelines on each rotation and other players take their turn sitting out. The teacher tries to help youngsters as they are hitting the bird across the net. After about five rotations of clears, players are told to move close to the net and try "tapping" the bird across the net ten times with the same rotation procedure. If conditions are crowded, it is well to alternate players by having a row tapping at the net and a row behind them, clearing. Each practice session should always begin with the "rotation" warm-up.

Six-Player Team Badminton. This is often referred to as "volleyball badminton." Three players stand in the front line, fairly close to the net, and three in the back row. If the standards holding the net are beyond the court sidelines, then the rules should be changed to make the standards the side boundary line, thus giving more space for play. The regulation rules for play are in effect, except that the serve always is from the right box to the player in the diagonal position in the front row. A temporary line placed halfway back from the front service line will ensure a low serve each time, rather than a high serve which might force the receiver to back up and hit a player in the back row. When the serve is lost, the opposite side rotates one spot counterclockwise before serving; the receiving side does not rotate until it serves. Players maintain their positions and hit the bird if it comes to them. They should call out for a shot so that each player knows who is going to hit the bird. Those in the front row try just to tap or drop the bird across the net while those

in the back row tries to smash or clear. The server must announce the score before each serve so that all players are aware of the score; if she forgets the serve is forfeited. Extra players substitute when a player makes an error. A game is 15 points.

Elimination. This is a variation of the preceding game. Each time a player misses a shot, instead of staying in the game she is eliminated, until one side is completely out. This is also called "King of the Kourt," and is best used just before class is dismissed.

Team Singles. This is a good game to use after the six-player team game because it forces the players to move around the court. In this formation all team members (from 4 to 10) sit in a single line outside the court. Each is assigned a place in line by the team captain. The captains of each team start a singles game against each other. Whoever misses the point sits down and is replaced by the next member of the team. The rules for singles play are used with one addition. The serving player can make only three points and is then replaced by the next player in line, who continues to serve until she misses the shot or makes her allotted three points. With large groups and few courts, the game is modified to *Half-court Team Singles*, in which the players use only half the court lengthwise and must serve straight ahead instead of diagonally. Here again, the server *must* announce the score before serving in order to keep every player aware of the correct score.

Double Doubles. This is a favorite game in which the official rules for doubles play are taught, and yet twice as many persons as in a real doubles game are playing at the same time. As in the six players-team game, the front row (of two) plays net shots from a position near the net. Players in the back row guard the back court and use the clear and smash shots. The serve is diagonally across the net, and if a point is scored the serving side makes a side switch, meaning that players exchange side positions. When the serve is lost, the new offensive side makes a front-back switch before beginning to serve. Thus players learn to change positions on winning a point (side switch), and on winnning the serve (front-back switch). The same rule applies for announcing the score before each serve.

Teacher Badminton. This is a challenge in which one player tries to keep the rest of the group hitting the bird back to her without a miss. The selected player ("teacher") is on one side of the net, and the rest of the group lines up on the other side but in a row outside the sideline. The teacher begins by hitting the shuttle across the net. The first player in line moves in, hits the shuttle and moves out by running across the court and beginning a new row on the opposite sideline. Meanwhile, the teacher hits the shuttle back and the second player moves in and returns it. Play continues until someone misses the shuttle. When a player misses, she goes to the end of the line,

everyone returns to her original position and the play starts over again. If the teacher misses, she is replaced by the player who returned the shuttle last. A good rule to impose is that no one can make the teacher miss until the entire line has been able to go across and back without missing. This restriction encourages real concentration on getting the shuttle back across the net. Players should be encouraged to use the forehand in going from the left side to the right and the backhand when returning from the right to the left sideline. Team captains can use this for practice purposes before playing any of the other team games. A variation is to have each player hit twice before moving off the court.

Perhaps the most important thing to remember when presenting the above mentioned badminton forms is that certain fundamentals of good badminton skills and techniques must be stressed over and over. Emphasis should be placed upon the following: 1) use of the "shake hands" grip, which is difficult for beginners, as opposed to the "frying pan" grip; 2) execution of a legal serve (the racket below the waist, the racket head below the holding hand and both feet in contact with the floor as the shuttle is hit); 3) maintenance of a position of readiness with the racket held up to meet the shuttle at all times; 4) development of teamwork with players calling for a shot or indicating if the shuttle is going out; 5) use of "position-play" wherein those players at the net must stay in front of the service line and play net.

Officiate! Who, Me?

DORIS E. HENDERSON

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One of the most neglected areas of badminton in the United States has been officiating. Most often, the responsibility for making decisions has been placed on the players themselves, and this has been considered an acceptable way to conduct many tournaments. With relatively few exceptions, umpires are not provided until the semifinal and final matches. Many tournaments do not even identify a person as an official referee, and roving service judges are practically nonexistent. How many times do we see a service judge *and* an umpire officiate a match? Very rarely, yet the NAGWS Techniques of Officiating give specific guidelines for these officials.

The integrity of the players in officiating their own matches is not being questioned. The question is, rather, whether this added responsibility should be theirs. If in the name of fair play and sportsmanship self-officiating is an integral and unique offering of badminton, then officials should be completely eliminated from the sport. In current practice, however, officials are provided for final matches and are apparently considered necessary to ensure that the matches be conducted as accurately and fairly as possible. If this is the case, officials should be provided in the early rounds of a tournament and are as necessary at that time (perhaps more so) as they are at the conclusion of a tournament. Players should not have to wait until the final matches before having a fault called.

Over the past several years most intercollegiate tournaments have been conducted in the manner described. In most matches an abundance of service faults were committed in the first round and thereafter by players of all ability levels. When the service faults were pointed out to some players, their comments ranged from "I didn't know" to "I know I've been serving illegally but since it was never called, I thought I could get away with it!" In the few final matches which were umpired by DGWS (now NAGWS)-rated officials, the concentration of the players was disrupted when service faults were called. In many instances the disruption caused players

to make errors that probably would not have occurred otherwise. If officials are not used in a match, obviously a player will not call a service fault against herself. Because of differences in interpretation of the law regarding "carries" or "throws," a player will rarely call an illegal hit against herself during play. All of the foregoing indicates the importance of providing officials for matches beginning with the first round of play.

Presently in the United States NAGWS offers the only officiating standards for techniques for conducting a badminton match. Very few officiating clinics have been conducted; almost anyone who is willing can, and does, umpire. The assumption generally is made that good players make good umpires, though this may not be true. Many of the best players refuse to officiate, and rightly so, realizing perhaps that they are inadequately prepared to conduct a match properly. Does the American Badminton Association have criteria for determining the quality of umpiring? Included in the most recent ABA rulebook are the NAGWS guidelines for officiating. Why, then, in intercollegiate tournaments, are there so few qualified officials?

Badminton as a competitive sport has relatively few players and few persons truly interested in developing the sport to its fullest capacity. Those involved seem to be interested primarily in playing or coaching. These same persons, however, are the first to complain when an official calls a fault. Very few coaches feel an obligation to encourage their players to attain a NAGWS rating. Why should players be encouraged to attain NAGWS ratings in badminton? Are they ever solicited to officiate matches because of holding a rating? In the long run the answer is no. The usual occurrence is that just before the semifinals the tournament chairman approaches and asks if anyone on the team is willing to be a linesman or umpire. Can you imagine the results if this procedure were followed in basketball tournaments?

The following recommendations are made in hopes that the standards of badminton officiating will be raised to true national status.

1. Coaches can easily train their players in the techniques of officiating badminton matches. Players can study the laws of badminton and techniques of officiating on their own time and during practice be given *opportunities* to officiate. Every player on the team should be expected to know the rules thoroughly and be able to officiate efficiently as a linesman, a service judge and an umpire. The coach seeks constantly to have her players attain a high level of competency in play – why not in officiating? With a little extra effort, almost any player should be able to attain at least an intramural rating.
2. Until there is an ample supply of qualified officials, roving service

judges should be provided for every tournament. As mentioned previously, in all tournaments I have observed over the past several years an overwhelming number of service faults were committed beginning with the first round of play. In most instances, the player had no knowledge of the factors constituting the legal execution of a serve and/or did not know she was serving illegally. The faults were obvious and easily discernible from any place in the gymnasium. Two possible reasons for the occurrence of service faults are: 1) Coaches are not enforcing the rule during practice sessions. Too often the assumption is that once a player has been made aware of the rule, it will be followed in practice. 2) Because roving service judges or umpires are not provided for matches until the semifinals and finals, rule infractions are continually reinforced in early rounds.

3. Qualified officials should be contacted prior to tournaments and requested to attend and serve as officials. In other words, tournament chairmen must seek out officials – including an official referee, umpires and service judges – and then use them throughout the tournament. Each official should have a NAGWS rating and officiate at the level of her rating. Those having national ratings should be used not only in the early rounds but especially in later rounds of the tournament.

Coaches have an obligation to raise the standards for conducting badminton tournaments. If not, the increasing interest in greater skill competency in badminton may falter. Those truly concerned about raising the standards of badminton must not only increase the prowess of the highly skilled badminton player but also elevate the level of officiating so that it will be as great an honor to umpire a match as to be one of the finalists.

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Prices are subject to change. Numbers in parentheses refer to the list of film distributors at the end of the article. Evaluation of films: E–excellent, VG–very good, G–good.

16mm Films

All England World Championship Singles Finals. 60 min., 1967, sd., b&w. Rental $25 (5). Exciting final match between Judy Hashman (USA) and Noriko Takagi (Japan). Accompanied by a short written preface describing the points of special interest.

Badminton Fundamentals. Sd., b&w. (4). Fundamental skills and rules of badminton demonstrated by expert and novice players. How to serve, forehand and backhand shots and other important playing techniques. G.

Flying Feathers. 10 min., sd., b&w. (3). A regulation men's singles game of badminton between two top-ranked professional players, Ken Davidson and Hugh Forgie. Andre Baruch keeps score and gives running comments concerning strokes used, footwork and strategy. Some trick shots. G.

Fundamentals of Badminton. 12 min., sd., b&w. Sale $60; rental $5 (two days). (1). Producer, George B. Pearson, University of Alabama. Technical advisor, Jim Poole. Basic fundamentals of badminton are demonstrated by some of the outstanding players in the U.S. Skills are demonstrated by both right- and left-handed players in slow motion and at regular speed. Also included are actual game situations with emphasis on strategy for singles, doubles and mixed doubles. G.

Filmstrips

Beginning Badminton Series. 1950. Color, with records. (2). Six filmstrips with explanations for each frame on accompanying

records. The filmstrips cover: 1) the game, 2) the rules simplified, 3) service stroke, 4) overhead stroke, 5) forehand stroke and 6) backhand stroke. The content and narration appear both in *Badminton Instructor's Guide* and the *Badminton Handbooks* by Davidson and Smith, E.

Film Loops

*The following loops were developed in consultation with Jim Poole, San Fernando Valley State College, Northridge, California.

Grip and Service. (6). Cat. No. 91-0018/1. Cartridged Super 8. $24.95. The grip is clearly shown, as are the basic skills of serving the deep service for singles play and the short service for doubles play. Legal service is also demonstrated.

Overhead Forehand Strokes. (6). Cat. No. 91-0034/1. Cartridged Super 8. $24.95. The loop features instruction on the fundamental body mechanism of all overhead strokes. Specific techniques of hitting the lob, drop and smash are demonstrated in slow motion with freezes of contact. Game applications at the conclusion of each particular stroke draw attention to common strategy.

Overhead Backhand Strokes. (6). Cat. No. 91-0042/1. Cartridged 8. $24.95. The same general format used in demonstrating the overhead forehand stroke is repeated here with the backhand grip and fundamentals of the backhand lob, drop and smash.

Underhand Net Strokes. (6). Cat. No. 91-0059/1. $24.95. Forehand and backhand underhand lobs and drops are demonstrated from net positions. Emphasis is on footwork, body positions and racket-hand and wrist positions. Game applications assist in demonstrating strategy.

Drives and Around-The-Head Strokes. (6). Cat. No. 91-0067/1. $24.95. A complete skill analysis of forehand and backhand drives is presented. The more complex and deceptive around-the-head stroke is demonstrated with emphasis on weight transfer and hand and racket positioning. Game applications are presented.

Footwork. (6). Cat. No. 91-0075/1. $24.95. Sharp reflexes and the ability to move rapidly from one position to another are critical to the badminton player. The most modern techniques of efficient movement are presented with slow-motion close-ups of footwork.

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*Any Holt/Ealing film or set of films may be ordered on Super 8 reels for use with the Kodak Ektographic Projector by replacing the final /1 of the catalog number with a /3; these reels also come complete with case and film notes. The complete six-loop set is $149.70 (Cat. No. 89-3644/1).

The following series of loop films was produced with James Breen of George Washington University, Washington, D.C., acting as consultant. The demonstrators are Jim Poole, Margaret Varner, James Breen and Janette Breen.

All of these loops are in color. Each is accompanied by a booklet amplifying the film content. Regular and slow motion as well as stop action are used in each loop to aid in analyzing various techniques. The complete set is available from The Athletic Institute for $234.

Grip And Cocking. (2) Code No. C-1 Cartridged Super 8–$18.95.
Footwork. (2) Code No. C-2 Cartridged Super 8–$18.95.
High Deep Serve. (2) Code No. C-3 Cartridged Super 8–$18.95.
Low Short Serve. (2) Code No. C-4 Cartridged Super 8–$18.95.
Drive Serve. (2) Code No. C-5 Cartridged Super 8–$18.95.
Flick Serve. (2) Code No. C-6 Cartridged Super 8–$18.95.
Forehand Overhead Shots–Defensive Clear, Attacking Clear. (2) Code No. C-7 Cartridged Super 8–$18.95.
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Net Shots. (2) Code No. C-12 Cartridged Super 8–$18.95.
Around the Head Shots–Clear, Smash, Drop. (2) Code No. C-13 Cartridged Super 8–$18.95.

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BADMINTON STUDY QUESTIONS
1972-1974

Revised by the Badminton Examinations and Ratings Committee

PART I

Directions

Select the one item which best answers each question. Assume no conditions exist other than those stated. Team A is always serving. Team B is always receiving.

1. The "in" side refers to which team?
   A. The serving team
   B. The receiving team
   C. The team that is ahead in points
   D. The first team to serve in a game
2. Which of the following constitutes a legal serve?
   A. The racket head is at shoulder height at the time of striking the shuttle.
   B. The server steps forward with the serve but both feet are stationary at the time the racket strikes the shuttle.
   C. The head of the racket is below the hand of the server at the time of striking the shuttle.
   D. The server's feet are on the line at the time of striking the shuttle.
3. When has the serve been delivered?
   A. As soon as the shuttle is dropped.
   B. As soon as the shuttle is struck by the server's racket.
   C. As soon as the shuttle passes over the net.
   D. As soon as the shuttle is struck by the receiver's racket.
4. Which one of the following would NOT be considered a "let?"
   A. On serve, shuttle touches net and lands in proper service court.
   B. On serve, the receiver makes no attempt to return shuttle.
   C. In play, shuttle tumbles down on opposite side of net and gets caught in net.
   D. Player serves out of turn and manages to win point after a lengthy rally.
5. Team A has the first serve in the first game of a doubles match. Team B wins the game. Which team serves first in the second game?

A. The winner of a coin toss.
B. The team which did not serve first in the first game.
C. The team which lost the first game.
D. The team which won the first game.

6. In women's singles, the players fail to change ends of the court at the proper time in the third game. What is the correct procedure when the error is discovered?
   A. Continue play without changing ends; existing score stands.
   B. Change ends as soon as the mistake is discovered; existing score stands.
   C. Change ends immediately; cancel all points made after the change should have occurred up to the time the error is discovered.
   D. Start the game over.

7. Which team has the option of setting a game?
   A. The serving team.
   B. The receiving team.
   C. Either the serving or receiving team.
   D. The team that received first in the game.

8. When must the claim to "set" be made?
   A. In men's singles, by the server before serving at 13-all.
   B. In women's singles, at a tie score of 9-9 and before the next service is delivered.
   C. In men's doubles by the server before serving at a score of 20-all.
   D. In women's doubles, by the server before serving and when the score has reached 13-13.

9. What is the announcement made by the umpire to start a doubles match?
   A. "Love-all, first service, play."
   B. "Love-all, second service, play."
   C. "Love-all, first service," server's name, receiver's name.
   D. "Second service, love-all," server's name, receiver's name.

10. The umpire suspended play in the second game of a match with the score 5-2, player A. Player B won the first game. Which of the following is correct?
    A. When play is resumed, it will start from 0-0 second game.
    B. When play is resumed, the existing score shall stand with player A serving.
    C. Once play is suspended, the entire match must be replayed.
    D. When play is resumed, it shall begin with the third game since player A was more than 2 points ahead at the time of suspension.

11. Who is responsible for checking the correct flight of a shuttle?
    A. Linesman
    B. Referee
    C. Service court judge
    D. Umpire

12. What is the proper procedure for a linesman?
    A. Watch the cork of the shuttle and where it lands.
    B. Watch the feathers of the shuttle and where it lands.
    C. Either watch the cork or feathers; it does not matter which lands out.
    D. Watch the line to be called and what part of the shuttle lands outside the line.

13. How should the names of the players in a doubles game be listed on the score sheet?
    A. The first server is listed first, and the receiving team is listed in any order.
    B. The first receiver is listed first, and the serving team is listed in any order.
    C. Any order is acceptable.
    D. The first server on both teams is listed first.

14. What is the correct procedure when a point has been made?
    A. Mark score, see that server changes courts and announce the score.
    B. Announce the score, mark score on score pad, wait for the server to serve the next point.
    C. Mark score, see that server changes courts, indicate that you are ready for him to serve the next point.
    D. Announce the score, mark it on the pad and see that the server changes courts.

15. How is "side out" indicated on the score pad?
    A. A vertical line is drawn through both scoring columns.
    B. A zero is placed in the server's column.
    C. A double vertical line is drawn through both scoring columns.
    D. The server's score is circled.

16. How does the umpire indicate a completed game on the score card?
    A. Draws two vertical lines through both scoring columns after the last point.
    B. Draws one vertical line through both scoring columns after the last point.
    C. Circles the final score of both teams.
    D. Circles the final score of the winning team.

17. Team A is the first team to serve in a doubles game. The first serve hits the net and falls in front of the short serve line. What is the decision?
    A. Second service; partner of the server for Team A serves from the left court.
    B. Side out; player on the right court for Team B serves.
    C. Let serve; server for Team A repeats the serve from the same court.
    D. Point; server for Team A serves from the left court.
18. What is the proper procedure if the shuttle touches the top of the net?
    A. If during a rally, there is a fault for the player who hit the shuttle into the net.
    B. If on the serve, "let" is called.
    C. If during a rally, play continues.
    D. If on the serve, it is a fault by the server.
19. During a rally the receiver twists her ankle and falls. She requests permission to discontinue play long enough to have the ankle taped. What is the decision?
    A. Play continues.
    B. The referee must be consulted before play is suspended.
    C. The service court judge must be consulted before play is suspended.
    D. The umpire suspends play.
20. Player A, the server, seeing that her opponent is going to smash near the net, holds her racket up near the net. The shuttle rebounds from player A's racket and goes over the net and falls to the floor. What is the decision?
    A. Let, reserve.
    B. Legal, play continues.
    C. Obstruction called on player A; side out.
    D. Point for player A; fault called on player B.
21. In doubles play, second service, the served shuttle goes into the wrong service court and hits B's partner. What is the decision?
    A. Fault, side out.
    B. Fault, second service.
    C. Fault; point for serving side.
    D. Let; repeat service.
22. In a singles game, the server delivers the service while standing with one foot on the center line. What is the decision?
    A. Legal; play continues.
    B. Server must repeat service.
    C. Server is told of error and correction is made.
    D. Side out.

23. In a doubles game, team A is serving, second service. During a rally, team B's return fails in team A's back boundary line. The linesman signals good, but the umpire thinks the return was out. What is the umpire's decision?
    A. Let.
    B. Side out.
    C. Point.
    D. Ask team A whether the shuttle hit in or not; then announce decision.

PART II

Directions

Each of the following statements presents a situation which would require one of the decisions listed below. Assume no conditions exist other than those stated. Team A is always serving. Team B is always receiving.

A. Point
B. Let
C. Second service
D. Side out

1. The server in a singles game hits the shuttle out of her hand. The hand holding the shuttle is just above the waist. The receiver hits the shuttle into the net. What is the decision?
2. In a singles game, player A's foot is on the center line during the serve. Player B misses the return and the umpire calls a point. Player B appeals to the referee who saw the play. What is the decision?
3. In a singles match in the third game with the score 8-4, player A serves but misses player B's return. Both players then realize their error in not changing ends of the court. What is the decision?
4. A roving service judge observes player A rocking up onto the toe of the back foot in delivering the serve. The serve lands untouched in B's proper receiving court. What is the decision?
5. In a singles game, player A serves to player B. Player B does not attempt to return the serve and informs the umpire that she was not ready. The serve was good. What is the decision?
6. In singles, player A serves to player B who rushes the service and smashes her return into the body of Player A. Player B's racket follows through over the net but does not touch it. What is the decision?
7. In a singles game, server A steps on, but not over, the short service line while serving. What is the decision?
8. During a doubles game, second service, the server hits a long serve very close to the back boundary line. The receiver steps

outside the court to play the shuttle. She hits the shuttle into the net and then indicates to the umpire that she should win the rally because the shuttle was going out of bounds. What is the umpire's decision?

9. It is the second inning, first service of a doubles game. The server makes a fake hit at the shuttle and then hits a short serve. During the rally a player on the serving team swings and misses a shuttle that goes out of bounds. What is the decision?
10. In a doubles game, first service, the server serves the shuttle into the net. As the shuttle falls to the floor of the server's court, the receiver attempting to hit the shuttle strikes the net with her racket. What is the decision?
11. In doubles play, second service, a player on team A serves from the wrong service court; her team wins the rally. The mistake is discovered immediately. What is the umpire's decision?
12. In a doubles game, 6-2 first service, player A slings the shuttle during a rally. Player B returns the shuttle, hitting it on the shaft of the racket as she does. Player A fails to return the shuttle. What is the decision?

ANSWERS AND RULE REFERENCES

PART I

	Answer	Rule Reference
1.	A	Law 5c
2.	C	Laws 14a, 16
3.	B	Law 9b
4.	A	Laws 12, 14, 17
5.	D	Law 11
6.	B	Law 8
7.	B	Law 7
8.	B	Law 7, a,b
9.	B	Tech Off., Duties of Ump. Calling Match #1b
10.	B	Law 22c
11.	B	Tech. Off., Duties of Ref., #4
12.	D	Tech. Off., Duties of Linesman 2,4
13.	D	Tech. Off., Scoring the Match
14.	A	Tech. Off., Duties of Ump. #6
15.	A	Tech. Off., Duties of Ump., Scoring
16.	A	Tech. Off., Scoring

	Answer	Rule Reference
17.	B	Laws 9, 11, 14b
18.	C	Law 17
19.	D	Law 22c
20.	C	Law 20
21.	C	Law 10, Law 14e
22.	D	Law 14c, 16
23.	B	Duties of Umpire, #3

PART II

1.	D	Law 14a
2.	D	Tech. Off., Duties of Ref., #5, Law 14e, 16
3.	D	Law 8
4.	A	Tech. Off., Inter. #2, #4
5.	B	Law 15
6.	D	Law 14c,f,i
7.	D	Law 14c, 16
8.	A	Law 14
9.	C	Law 14d
10.	C	Law 19
11.	B	Law 12
12.	C	Law 14h; Tech., Off., Duties of Umpire., During Match

Inquiries concerning badminton questions or examinations should be addressed to the Chairman of the Badminton Examinations and Rating Committee:

Betty Alexander
Box 2269, SHSU Station
Huntsville, Texas 77340

TECHNIQUES OF OFFICIATING BADMINTON

BADMINTON SUBCOMMITTEE
Principles and Techniques of Officiating Committee

DUTIES OF THE REFEREE

In each tournament the chairman or committee in charge shall appoint a referee to act for them in regards to rules, scoring and regulating play.

The referee shall–

1. Be in complete charge of match play except for the scheduling of the time and place of matches.
2. Be thoroughly familiar with, and rigidly enforce, the official laws of badminton, and the interpretations which are a part of the laws.
3. Have the authority and responsibility to appoint and remove umpires, linesmen, and service judges.
4. See that the playing area, nets, posts, shuttles, etc., meet the requirements of the laws of badminton.
5. Be the final authority on appeal from the decision of the umpire, with authority to reverse the umpire's decision involving a point of law only. The scoring of a match can be affected only if the appeal be made to the referee before the next service is delivered.
6. Be present or available at the playing area at all times during match play, or be specifically represented by a deputy appointed by him.

DUTIES OF THE UMPIRE

The umpire has three main responsibilities: *To officiate* the match for the player, *to link* the match with the spectators, and *to score* the match.

The umpire shall–

1. Thoroughly know the laws of badminton.
2. Have the final decision on all points of fact. A player may, however, appeal to the referee on a point of law only.
3. Recognize the linesman's decision as final on all points of fact on his own line. The umpire cannot overrule him. If a linesman

is unsighted, the umpire may then give a decision if he can; otherwise, a let should be played.

4. Recognize a service judge's decision as final on all points of fact in connection with the delivery of the service as set out in Service Court Judge, 2. The umpire is responsible for calling the *receiver's* faults.
5. Call the score distinctly and loudly enough to be heard clearly by players and spectators. Call promptly and with authority. If a mistake is made, admit it, apologize, and correct it.
6. Score the match and record points on a score pad. When a point is finished, first mark the score, then see that the server changes courts and announce score before the next service. (If the umpire possesses less than a DGWS (now NAGWS) National rating, she may ask the service court judge to keep a duplicate score.)
7. Never ask spectators about a decision or be influenced by their remarks. If a decision cannot be reached, a let should be awarded.
8. Be responsible for all lines not covered by linesmen. (If at all possible, one person should be assigned to lines which the umpire is not in a favorable position to see.)
9. Firmly control the match without being officious. Keep play flowing without unnecessary interruptions while ensuring that the laws are observed. The game is for the players.
10. Allow the game to proceed, and do not call a "fault" when a doubt arises in the mind of the umpire or service judge as to whether an infringement of the laws has occurred. (The player has benefit of the decision.)
11. Be sole judge of any suspension of play and have the right to disqualify an offender for leaving the court or delaying the game (Law 22).
12. In the absence of a referee, appoint linesmen and service judges at his discretion.

Before the Match—

13. Obtain the score pad from the referee. Enter player's position and receiver and server on the scorecard.
14. Check the net for height. See that the posts are on the lines and that tapes are correctly placed (Laws 2 and 3).
15. Ensure that the linesmen and service judges are correctly placed and know their jobs (see Linesmen and Service Court Judge).
16. Ensure that a sufficient quantity of tested shuttles (according to Law 4) is readily available for the match in order to avoid delays during play. If the players cannot agree, the umpire should have the shuttles tested; in a tournament, she should refer to the

referee; in a match, the captains or referee. Once shuttles have been found to be acceptable, ensure that they are used unless circumstances alter.

Starting the Match–

17. Ensure that tossing is correctly carried out and that the winners and losers correctly exercise their options under Law 6.
18. Mark on the score pad for doubles the names of the players starting in the right-hand service courts. This enables a check to be made at any time to see whether the players are in their correct service courts. During the game, if the players get in their wrong service courts unnoticed, so that they have to stay there (Law 12), change the score pad accordingly.

During the Match–

19. See that no unnecessary delay occurs, or that the players do not leave the court without the permission of the umpire (Law 22). The umpire or the service court judge must determine if a delay of game is made by the server by taking more than five seconds to deliver the serve after both the server and receiver have taken their stance. A warning must be given for the first infraction of this rule in any match.
20. Record the score, server, and the correct service courts of the players on the score pad if an unavoidable hold-up occurs in a match (Law 22c).
21. Call a let if a shuttle or other object not connected with the match in progress invades the court or its environs, or a spectator interferes with the players.
22. Watch for faulty serving if there is no service judge. It is difficult to detect from the chair "serving above the waist" or "racket head above the hand." If there is any doubt, caution the player and ask for a service judge.
23. If no service judge is available, see that the *server* has both feet on the floor in a stationary position inside the service court when the shuttle is struck, and that there is no feint (Law 14d and Interpretation 1).
24. See that the *receiver* has both feet on the floor in a stationary position inside the service court until the service is delivered, and that she does not move before the shuttle is struck (Laws 14c and 16).
25. Watch for double hit or faulty stroke under Law 14h. These should be immediately called by the umpire as "fault."
26. Watch for obstruction – for instance, sliding under the net; throwing the racket into the opponent's court; balking or

unsighting an opponent during services (see Laws 14d, 14j, 16, 20, and Interpretation 5). Immediately call "fault, obstruction."

27. Watch for serving and receiving out of turn or from the wrong court. Law 12 should be thoroughly understood. When the rally has been completed, call "fault, service" or "fault, receiver," whichever the case may be.
28. Watch for striking of the shuttle before it crosses the net, and hitting the net with racket, person, or dress while the shuttle is in play (Laws 14f and 14g). Call "fault" immediately.
29. See that the option of "setting" is correctly exercised (Law 7).
30. See that the players change ends following each game and at the correct score in the third game (Law 8).
31. See that the winning side serves first.
32. Watch for a player interfering with the correct speed of the shuttle. The player should be warned and the shuttle discarded if necessary.
33. On no account allow players to call "no shot," "fault," "carry," etc.; warn them if they do, as it may distract their opponents. On no occasion should the umpire use the terms "no shot," "foul," or "no." Always use the term "fault."
34. Provide for the correct interval between the second and the third games where allowed.

At the End of the Match–

35. Announce winners and scores. Sign and turn in scorecard.

Calling the Match

1. When the players have finished warming up, announce–
   a. In a tournament:
      1) "final or semifinal of . . . ." If neither, say nothing.
   b. In a tournament or match:
      1) Names of players with country, county, or club where applicable.
      2) Name of the first server, and in the case of doubles, of the receiver.
      3) To start the match, call "love all, second service, play" in doubles; but "love all, play" in singles.
2. The umpire shall call the score immediately after marking the scorecard upon completion of play. Always call the server's score first.
3. Singles – when a player loses his service, call "side out" followed by the score in favor of the new server.
4. Doubles – whenever the first server is serving, only the score will be called. When the second server is serving, call the score and "second server" for each point.

5. When a side reaches 14, or in the case of ladies singles, 10, call on the first occasion only "game point" or "match point." If a further game or match point occurs after setting, call it again on the first occasion. Game point or match point should always immediately follow the server's score where applicable, and precede the receiver's score.
6. When a linesman calls "out," or the shuttle falls outside a line for which the umpire is himself responsible, call "out" before calling the score.
7. When the option to set occurs, ask the player's or players' decision. Announce the decision loudly so that spectators can hear, calling "set 2 points," or 3 or 5 as appropriate, followed by "love-all."

At the End of the Game--

8. Announce "game to . . ." (the name[s] of the player[s] in a tournament or the name of the team represented – in the case of a meeting of representative teams) followed by the score – winner's score first – and, if appropriate, by "one game all." In the case of a match in a meeting between two teams, always define the contestants by the names of the actual players.
9. In the event of set games, announce the total game points, i.e., 12-9, 18-13.
10. At the end of the match announce "game and match to . . ." (the name[s] of the winner[s] and all scores).

Scoring the Match

The contestants' name should be entered on the horizontal lines of the scorecard.

A vertical line drawn through both scoring columns indicates service over.

At the beginning of a side's term of service, their existing score should be carried over and noted. Example: The "0" and the second "5" in part 4 in the singles scoring given below.

In regard to setting, the decision not to set is indicated by writing "no set" on the scoresheet at the point where the setting possibility occurs (see In setting, 1).

On a decision to set, draw a vertical line through the scoring column of the serving team and write the option on the scoresheet where the setting possibility occurs.

A double vertical line is drawn through both scoring columns and the final score entered to the right of the scorecard when the game is ended (see In setting, 2).

In singles:

1.

Jones/ 0 1 2 3 4 5		
Smith/		

Jones serves and makes 5 points; then

2.

Jones/ 0 1 2 3 4 5		
Smith/	0	

Jones loses the serve;

3.

Jones/ 0 1 2 3 4 5		
Smith/	0 1 2	

Smith scores 2 points; then

4.

Jones/ 0 1 2 3 4 5		5
Smith/	0 1 2	

Smith loses the serve.

In doubles:

The initial server for each team shall be listed first.

To indicate the completion of one service, draw a circle around the last point (number) made by the first server. This will clearly designate the point at which the second server begins her term of service.

1.

Smith-Jones/ (0) 1 2 3		
Reed-Brown/	0	

Smith-Jones commence serving, win 3 points, and lose the serve;

2.

Smith-Jones/ (0) 1 2 3		
Reed-Brown/	0 1 2	

Reed-Brown win 2 points after obtaining the serve.

3.

Smith-Jones/ (0) 1 2 3		
Reed-Brown/	0 1 (2)	

Reed-Brown lose the point, second serve.

4.

Smith-Jones/ (0) 1 2 3		3
Reed-Brown/	0 1 (2) 3 4 5	

Reed-Brown win 3 more points and then lose the serve.

In setting:

1.

Smith-Jones/	1 3		13
Reed-Brown/		(1) 12 13 14	

No Set

Smith-Jones have option to set at 13-all, decide not to set; no set is written at the current server's score of 13. They score a point, then lose the serve.

2.

Set 3 1

Smith-Jones/	13		(13) 14	2		16
Reed-Brown/		(1) 12 13 14			1 2 3	17

Smith-Jones win a point and score is 14-all. Reed-Brown have option to set and set 3. This is written above the server's current score (14) and a line is drawn through the serving team's (Smith-Jones) scoring column. Further scoring starts at 1, etc.

DUTIES OF THE SERVICE COURT JUDGES

The service court judges shall—

1. Sit on a low chair on the side of the court opposite the umpire. One service judge will sit on one side of the net while the other judge sits on the other side of the net. The service court judge should observe the legality of the serve by the server on the opposite side of net.
2. Be responsible for seeing that the server, at the moment of striking the shuttle—
   a. Does not have any part of the head of the racket above any part of the hand holding the racket (Law 14a).
   b. Does not have the shuttle above his waist (Law 14a).
   c. Has both feet in a stationary position on the floor inside the service court (Law 16).
   d. Does not feint (Law 14d and Interpretation 1).

(NOTE: To enable the service court judge to determine if the shuttle was legally contacted below the waist, the following technique is recommended. A piece of paper, cardboard, or like material can be held in such a way that the server's body from the waist up is completely blocked from vision. If the bird is contacted below the waist, the judge will see the bird. If the bird is not visible, an illegal serve was made.)

3. If the server does not comply with all the points in item 2 above, the service judge should immediately call "fault" loudly, and ensure that the umpire hears him. *Note:* The umpire watches the receiver.
4. Determine whether the server delays the game by taking more than five seconds to deliver the serve after the server and receiver have taken their positions. A warning must be given for the first violation of this rule in any match (Law 14d; Interpretation #1).
5. Assist in keeping score if necessary.

DUTIES OF THE ROVING SERVICE JUDGE

The roving service judge shall–

1. Wear an arm band or recognizable badge.
2. Move among the courts observing the services that are being executed in each match.
3. Position himself by the net post of any match in which service faults may be occurring.
4. Upon observing a service fault call a "let." He will then warn the server and explain the nature of the fault.
5. If the server in question fails to comply with a legal serve (Duties of Service Court Judge, item 2), the roving service judge shall call a "fault."

DUTIES OF THE LINESMEN

The linesmen shall–

1. Sit on chairs in prolongation of their lines, at the ends of the court and at the side opposite the umpire.
2. Each be entirely responsible for his line. If the shuttle falls out, no matter how far, call "out" promptly in a clear, loud voice. The linesman should reinforce the call by extending both arms horizontally at shoulder level with the right arm pointing to the right and the left arm to the left. If the shuttle falls in, say nothing but point in the direction of the court with a one-hand motion. The signal will assure the umpire that the linesman has seen the shuttle. If unsighted, inform the umpire immediately by placing his hands over his eyes. *Note:* Notice where the cork of the shuttlecock lands in making a decision. A flat-angled shuttlecock may be out although the feathers are well inside the court line. Also, watch the line, not the shuttle. In watching a moving object, a stationary one may be lost. At the first indication that the shuttle may strike near your line, switch

your gaze from the shuttle to the area where you expect it to land.

3. Never make a call until the shuttle has actually struck the ground outside the court.
4. If the cork touches any part of the line, it is in. Change a decision whenever necessary by voicing it before the next service.
5. If three linesmen are available, two should take a back boundary line and (in doubles) long service line each; the third, the side lines farthest from the umpire. If additional linesmen are available, they should be used according to the umpire's preference.

INTERPRETATIONS

1. When an umpire is officiating, the laws of badminton shall be enforced by him. In the absence of an umpire the players concerned shall carry out the laws, and if a violation be claimed by one side and not acknowledged by the other, a let shall be allowed. Umpires are recommended for all semifinal or final matches in any championship tournament.
2. In order to eliminate service faults in the early rounds prior to the semifinals or quarter-finals, a qualified service judge may be provided to act as a *roving* service judge. He should be provided with an arm band or recognizable badge, and the players should be informed of his presence. His duty will be to position himself by the net post of a match in question, and on observing a service fault call a let. He will then warn the server and explain the nature of the fault. If the server continues to commit an illegal service the roving judge shall call a fault on the server.
3. If the receiver is faulted for moving before the service is delivered or for not being in the correct service court (see Laws 16 or 14c), and at the same time the server is also faulted for a service infringement (see Laws 14a, c, h, or 16) it shall be a let. If any player feints or intentionally balks his opponent, even before the delivery of the service (see Law 24d) the fault should be recorded against the player concerned.
4. Service foot faults: Clarification If Law 16.
   a. Any forward step of either foot, or any other foot movement, must be completed and both feet must reach a stationary position on the floor prior to the start of racket motion to serve. "Start of racket motion" includes the backswing.

b. Part of Law 16 reads "some part of both feet of these players must remain in contact with the ground in a stationary position until the service is delivered." The following three questions were asked and it has been ruled that the points raised do not constitute a breach of the law. Accordingly, players should not be faulted for these actions.

(1) Does this mean that the same part of a foot must remain in contact with the ground, or could it be a different part of the same foot?

(2) If the back foot of a server starts with the toe and heel in contact with the ground and rises onto the toe as the service is struck, with the heel rising straight, is this in order?

(3) On the other hand, if the heel comes off the ground and swivels through an angle of 90 degrees, as is frequently done, which means that the part of the toe remaining in contact with the ground swivels and moves, is this correct?

5. Service terminology: Law 14d states "If before or during the delivery of the service, any player makes a preliminary feint or otherwise balks his opponent, it is a fault." Webster's Second International Dictionary defines the terms "feint" and "balk" as "a feint is an assumed or false appearance . . . a mock blow or attack," and "a balk is a failure of a competitor to jump, vault, or the *like*, after taking a preliminary run . . . ." The service may be regarded as started when both players have taken stationary positions in readiness to serve and to receive. From that point until the shuttle is struck by the server, Law 14d applies. A motion to be considered a feint or balk must have some element of deception; it must not be some characteristic motion that has no purpose and does not deceive the receiver.

6. Calling faulty hits: Slow motion films have shown that practically all sharply hit shuttles strike the racket twice. The cork hits the racket, then the shuttle quickly reverses ends, and the feathers brush the gut as the shuttle leaves the racket. The motion is so fast that it seems to be a single hit. It is important for the umpire to recognize that illegal hits are a matter of degree and judgment and to give the hitter the benefit of the doubt.

LAWS OF BADMINTON*

(As adopted by the International Badminton Federation and the American Badminton Association)

1. Court. (a) The court shall be laid out as in Diagram A (except in the case provided for in paragraph b of this law) and to the measurements there shown, and shall be defined preferably by white or yellow lines, or, if this is not possible, by other easily distinguishable lines, 1½ inches wide.

In marking the court, the width (1½ inches) of the center lines shall be equally divided between the right and left service courts; the width (1½ inches each) of the short service line and the long service line shall fall within the 13-foot measurement given as the length of the service court; and the width (1½ inches each) of all other boundary lines shall fall within the measurements given.

(b) Where space does not permit the marking out of a court for doubles, a court may be marked out for singles only as shown in Diagram B. The back boundary lines become also the long service lines, and the posts, or the strips of material representing them as referred to in Law 2, shall be placed on the sidelines.

(c) The height of a court for international competition play shall be a minimum of 26 feet or 8 metres from the floor over the full court. This height shall be entirely free of girders and other obstructions over the area of the court.

There shall also be at least 4 feet or 1.25 metres clear space surrounding all the outer lines of the court, this space being also a minimum requirement between any two courts marked out side by side.

2. Posts. The posts shall be 5 feet 1 inch in height from the surface of the court. They shall be sufficiently firm to keep the net strained as provided in Law 3, and shall be placed on the side boundary lines of the court. Where this is not practicable, some method must be employed for indicating the position of the side boundary line where it passes under the net, e.g., by the use of a thin post or strip of material not less than 1½ inches in width, fixed to the side boundary line and rising vertically to the net cord. Where this is in use on a court marked for doubles, it shall be placed on the side boundary line of the doubles court irrespective of whether singles or doubles are being played.

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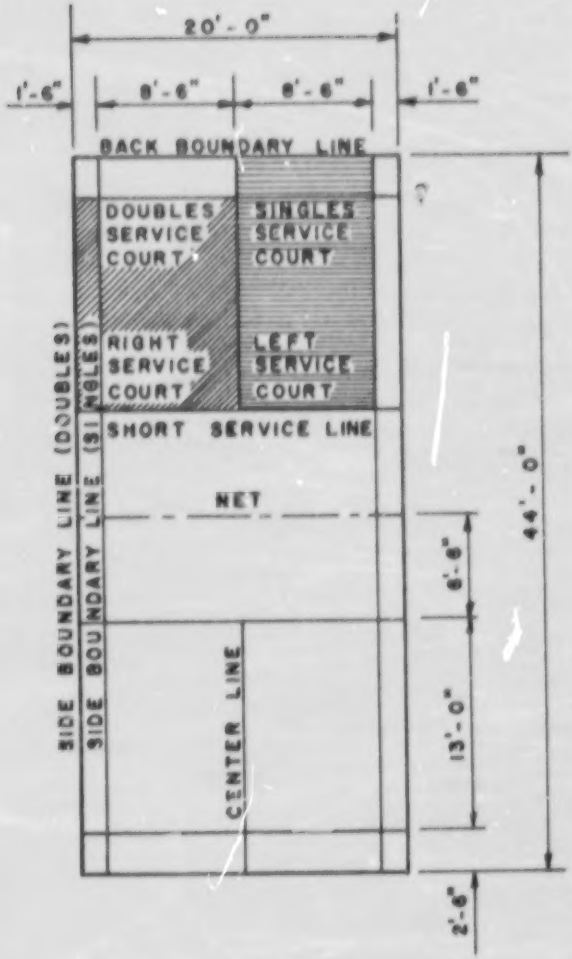
20'-0"
1'-6"
8'-6"
8'-6"
1'-6"
BACK BOUNDARY LINE
DOUBLES SERVICE COURT
SINGLES SERVICE COURT
RIGHT SERVICE COURT
LEFT SERVICE COURT
SHORT SERVICE LINE
NET
SIDE BOUNDARY LINE (DOUBLES)
SIDE BOUNDARY LINE (SINGLES)
CENTER LINE
44'-0"
8'-6"
13'-0"
2'-6"

Diagram A

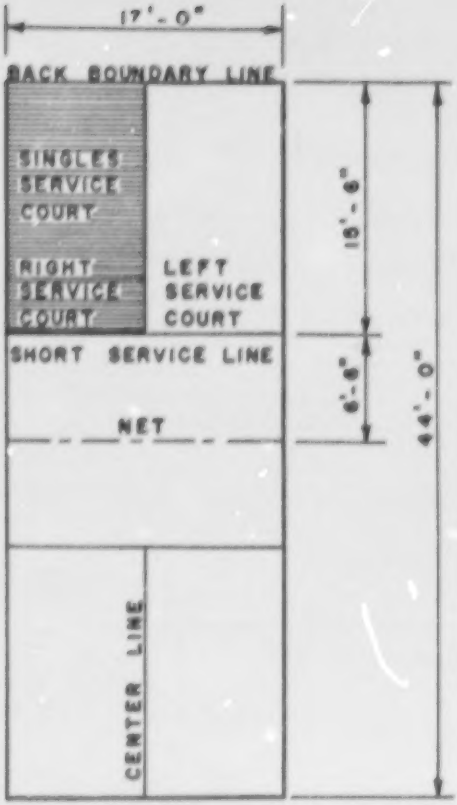
17'-0"
BACK BOUNDARY LINE
SINGLES SERVICE COURT
RIGHT SERVICE COURT
LEFT SERVICE COURT
SHORT SERVICE LINE
NET
CENTER LINE
18'-6"
6'-6"
44'-0"

Diagram 5

3. Net. The net shall be made of fine natural cord or artificial fibre of a dark colour and an even thickness not exceeding 5/8 inch to 3/4 inch (1.5 to 2 cm.) mesh. It shall be firmly stretched from post to post, and shall be 2 feet 6 inches in depth. The top of the net shall be 5 feet in height from the floor at the center, and 5 feet 1 inch at the posts, and shall be edged with a 3-inch white tape doubled and supported by a cord or cable run through the tape and strained over and flush with the top of the posts.

4. Shuttle. A shuttle shall weigh from 73 to 85 grains, and shall have from 14 to 16 feathers fixed in a cork of 1 inch to 1-1/8 inches in diameter. The feathers shall be from 2½ to 2¾ inches in length from the tip to the top of the cork base. They shall have from 2-1/8 to 2½ inches spread at the top and shall be firmly fastened with thread or other suitable material.

Subject to there being no substantial variation in the general design, pace, weight, and flight of the shuttle, modifications in the above specifications may be made, subject to the approval of the national organization concerned, (a) in places where atmospheric conditions, due either to altitude or climate, make the standard shuttle unsuitable; or (b) if special circumstances exist which make it otherwise expedient in the interests of the game.

(Carlton Nylon Shuttles – Tournament and International grades – and ESL Plastic Shuttles have been approved for all tournaments except adult "Open" tournaments for which a $5 sanction fee is charged; Closed and Open ABA Amateur Championships; and U.S. National Junior Championships.)

A shuttle shall be deemed to be of correct pace if, when a player of average strength strikes it with a full underhand stroke from a spot immediately above one back boundary line in a line parallel to the sidelines, and at an upward angle, it falls not less than 1 foot and not more than 2 feet 6 inches short of the other back boundary line.

5. Players. (a) The word "player" applies to all those taking part in a game.

(b) The game shall be played, in the case of the doubles game, by two players on a side, and in the case of the single game, by one player on a side.

(c) The side for the time being having the right to serve shall be called the "in" side, and the opposing side shall be called the "out" side.

6. The Toss. Before commencing play, the opposite sides shall toss, and the side winning the toss shall have the option of (a) serving first, (b) not serving first, or (c) choosing ends. The side losing the toss shall then have choice of any alternative remaining.

7. Scoring. (a) The doubles and men's singles game consists of 15 or

21 points, as may be arranged, provided that in a game of 15 points, when the score is 13-all, the side which has first reached 13 has the option of "setting" the game to 5, and that when the score is 14-all, the side which first reached 14 has the option of "setting" the game to 3. After a game has been "set," the score is called "love-all," and the side which first scores 5 or 3 points, depending on whether the game has been "set" at 13- or 14-all wins the game. In either case the claim to "set" the game must be made before the next service is delivered after the score has reached 13-all or 14-all, provided also that in a game of 21 points the same method of scoring be adopted, substituting 19 and 20 for 13 and 14. (In all Championship play, 15 points is the official game, rather than 21.)

(b) The ladies singles game consists of 11 points, provided that when the score is "9-all" the player who first reached 9 has the option of "setting" the game to 3, and when the score is "10-all" the player who first reached 10 has the option of "setting" the game to 2.

(c) A side rejecting the option of "setting" at the first opportunity shall not be thereby debarred from "setting" if a second opportunity arises.

(d) In handicap games, "setting" is not permitted.

8. The opposing sides shall contest the best of three games, unless otherwise agreed. The players shall change ends at the commencement of the second game and also of the third game, if any. In the third game, the players shall change ends when the leading score reaches –

(a) 8 in a game of 15 points,

(b) 6 in a game of 11 points,

(c) 11 in a game of 21 points,

or in handicap events when one of the sides has scored half the total number of points required to win the game (the next highest number being taken in the case of fractions). When it has been agreed to play only one game, the players shall change ends as provided above for the third game.

If, inadvertently, the players omit to change ends as provided in this Law at the score indicated, the ends shall be changed immediately the mistake is discovered, and the existing score shall stand.

9. Doubles Play. (a) It having been decided which side is to have the first service, the player in the right-hand service court of that side commences the game by serving to the player in the service court diagonally opposite. If the latter player returns the shuttle before it touches the ground, it is to be returned by one of the "in" side, and then returned by one of the "out" side, and so on, until a fault is

made or the shuttle ceases to be "in play" (see paragraph b). If a fault is made by the "in" side, their right to continue serving is lost, as only one player on the side beginning a game is entitled to do so (see Law 11), and the opponent in the right-hand service court then becomes the server; but if the service is not returned or the fault is made by the "out" side, the "in" side scores a point. The "in" side players then change from one service court to the other, the service now being from the left-hand service court to the player in the service court diagonally opposite. So long as a side remains "in," service is delivered alternately from each service court into the one diagonally opposite, the change being made by the "in" side when, and only when, a point is added to its score.

(b) *The first service* of a side in each inning shall be made from the right-hand service court. A service is delivered as soon as the shuttle is struck by the server's racket. The shuttle is thereafter in play until it touches the ground or until a fault or let occurs, or except as provided in Law 19. After the service is delivered, the server and the player served to may take up any position they choose on their side of the net, irrespective of any boundary lines.

10. The player served to may alone receive the service, but should the shuttle touch or be struck by his partner, the "in" side scores a point. No player may receive two consecutive services in the same game, except as provided in Law 12.

11. Only one player of the side beginning a game shall be entitled to serve in its first innings. In all subsequent innings, each partner shall have the right, and they shall serve consecutively. The side winning a game shall always serve first in the next game, but either of the winners may serve and either of the losers may receive the service.

12. If a player serves out of turn or from the wrong service court (owing to a mistake as to the service court from which service is, at the time being, in order), *and his side wins the rally*, it shall be a let, provided that such let be claimed and allowed or ordered by the umpire before the next succeeding service is delivered.

If a player of the "out" side standing in the wrong service court is prepared to receive the service when it is delivered, and his side wins the rally, it shall be a "let," provided that such "let" be claimed and allowed, or ordered by the umpire, before the next succeeding service is delivered.

If in either of the above cases, the side at fault loses the rally, the mistake shall stand and the players' position shall not be corrected.

Should a player inadvertently change sides when he should not do so and the mistake not be discovered until after the next succeeding service has been delivered, the mistake shall stand, and a let cannot

be claimed or allowed, and the players' position shall not be corrected.

13. Singles Play. Doubles Laws 9 to 12 hold good except that –

(a) The players shall serve from and receive service in their respective right-hand service courts only when the server's score is 0 or an even number of points in the game, the service being delivered from and received in their respective left-hand service courts when the server's score is an odd number of points. Setting does not affect this sequence.

(b) Both players shall change service courts after each point has been scored.

14. Faults. A fault made by a player of the side which is "in" puts the server out; if made by a player whose side is "out," it counts a point to the "in" side. It is a fault –

(a) If in serving, the shuttle at the instant of being struck be higher than the server's waist, or if at the instant of the shuttle being struck the shaft of the racket be not pointing in a downward direction to such an extent that the whole of the head of the racket is discernibly below the whole of the server's hand holding the racket.

(b) If in serving, the shuttle falls into the wrong service court (i.e., into the one not diagonally opposite to the server), or falls short of the short service line, or beyond the long service line, or outside the side boundary lines of the service court into which service is in order.

(c) If the server's feet are not in the service court from which service is at the time being in order, or if the feet of the player receiving the service are not in the service court diagonally opposite until the service is delivered (see Law 16).

(d) If before or during the delivery of the service any player makes preliminary feints or otherwise intentionally balks his opponent or if any player deliberately delays serving the shuttle or in getting ready to receive it, so as to obtain an unfair advantage.

(e) If either in service or play the shuttle falls outside the boundaries of the court, or passes through or under the net, or fails to pass the net, or touches the roof or side walls or the person or dress of a player. (A shuttle falling on a line shall be deemed to have fallen in the court or service courts of which such line is a boundary.)

(f) If the shuttle in play be struck before it crosses to the striker's side of the net. (The striker may, however, follow the shuttle over the net with his racket in the course of his stroke.)

(g) If when the shuttle is in play a player touches the net or its supports with racket, person, or dress.

(h) If the shuttle be held on the racket (i.e., caught or slung during the execution of a stroke); or if the shuttle be hit twice in succession by the same player with two strokes; or if the shuttle be hit by a player and his partner successively.

(i) If in play a player strikes the shuttle (unless he thereby makes a good return), or is struck by it, whether he is standing within or outside the boundaries of the court.

(j) If a player obstructs an opponent.

(k) If Law 16 be transgressed.

General

15. The server may not serve until his opponent is ready, but the opponent shall be deemed to be ready if a return of the service is attempted.

16. The server and the player served to must stand within the limits of their respective service courts (as bounded by the short and long service lines, the center lines and the sidelines), and some part of both feet of these players must remain in contact with the surface of the court in a stationary position until the service is delivered. A foot on or touching a line in the case of either the server or the received shall be held to be outside his service court (see Law 14c).

The respective partners may take up any position, provided they do not unsight or otherwise obstruct an opponent.

17. (a) If in the course of service or rally the shuttle touches and passes over the net, the stroke is not invalidated thereby. It is a good return if the shuttle, having passed outside either post, drops on or within the boundary lines of the opposite court. A let may be given by the umpire for an unforeseen or accidental hindrance.

(b) If in service or during a rally, a shuttle, *after passing over the net*, is caught in or on the net, it is a let.

(c) If the receiver is faulted for moving before the service is delivered, or for not being within the correct service court, in accordance with Laws 14c or 16, and at the same time the server is also faulted for a service infringement, it shall be a "let."

(d) When a "let" occurs, the play since the last service shall not count, and the player who served shall serve again, *except when Law 12 is applicable.*

18. If the server, in attempting to serve, misses the shuttle, it is not a fault; but if the shuttle be touched by the racket, a service is thereby delivered.

19. If when in play the shuttle strikes the net and remains suspended there, or strikes the net and falls towards the surface of the court on the striker's side of the net, or hits the surface outside the court and an opponent then touches the net or shuttle with his

racket or person, there is no penalty, as the shuttle is not *then* in play.

20. If a player has a chance of striking the shuttle in a downward direction when quite near the net, his opponent must not put up his racket near the net on the chance of the shuttle rebounding from it. This is obstruction within the meaning of Law 14j. A player may, however, hold up his racket to protect his face from being hit if he does not thereby balk his opponent.

21. It shall be the duty of the umpire to call "fault" or "let" should either occur, without appeal being made by the players, and to give his decision on any appeal regarding a point in dispute, if made before the next service, and also to appoint linesmen and service judges at his discretion. The umpire's decision shall be final, but he shall uphold the decision of a linesman or service judge. This does not preclude the umpire also from faulting the server or receiver. Where, however, a referee is appointed, an appeal shall lie to him from the decision of an umpire on questions of law only.

22. Continuous Play – Play shall be continuous from the first service until the match be concluded except that:

(a) In the International Badminton Championships there shall be allowed an interval not exceeding five minutes between the second and third games of a match.

(b) When necessitated by circumstances not within the control of the players, the umpire may suspend play for such a period as he may consider necessary. If play be suspended, the existing score shall stand and play be resumed from that point. Under no circumstances shall play be suspended to enable a player to recover his strength or wind, or to receive instruction or advice. Except in the case of an interval provided for above, no player shall be allowed to receive advice during a match or leave the court until the match be concluded without the umpire's consent. The umpire shall be the sole judge of any suspension of play and he shall have the right to disqualify an offender. (In the U.S., at the request of any player, a five-minute rest period between the 2nd and the 3rd game will be granted, in all events. Such a rest period is mandatory for all Junior Tournaments.)

INTERPRETATIONS

1. Any movement or conduct by the server that has the effect of breaking the continuity of service after the server and receiver have taken their positions to serve and to receive the service is a preliminary feint. For example, a server who, after having taken up his position to serve, delays hitting the shuttle for so long as to

be unfair to the receiver, is guilty of such conduct. (See Law 14d.) Note – U.S. interpretation is: it is a fault if the serve is not delivered in five seconds from the time that both server and receiver have taken their stance.

2. It is obstruction if a player invades an opponent's court with racket or person in any degree except as permitted in Law 14f (see Law 14j).
3. Where necessary on account of the structure of a building, the local badminton authority may, subject to the right of veto by its national organization, make bylaws dealing with cases in which a shuttle touches an obstruction.

CLARIFICATION OF RULES – NAGWS Badminton Committee

Law 12, Paragraph 1. Serving out of turn from the wrong service court may mean (a) the correct server delivers a serve from the wrong service court, or (b) this wrong server delivers a serve from either the correct or incorrect service court.

Law 12, Paragraph 2. "Takes the serve" means receives the serve.

Law 12, Paragraph 4. The procedure given for a player inadvertently changing sides when he should not do so, under the conditions noted, also applies should a player fail to change sides when he should do so, under the same conditions.

ABA Statement

Although the preceding are the rules as of this date, these rules may change from year to year to some extent. Hence, anytime after July, 1969, to assure yourself that you are dealing with the up-to-date rules, you should secure them from the Chairman, American Badminton Association Rules Book Committee. The current Chairman is Lester E. Hilton, 15 Tanglewood Drive, Cubberland, Rhode Island 02864.

NAGWS SQUASH COMMITTEE
1972-1974

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NAGWS SQUASH COMMITTEE CHAIRMAN
1974-1976

CAROL NEWHOF, Smith College, Northampton, MA 01060

From Tennis to Squash

BETTY CONSTABLE

Betty Howe Constable is the varsity women's squash coach at Princeton University, Princeton, New Jersey. A five-time winner of the U.S. Women's Squash Racquets Singles Championship and member of the international Wolfe-Noel Cup team, she has in recent years held the senior singles and doubles titles several times.

I have had a great deal of pleasure and excitement over the past two years in helping develop a women's squash racquets program and starting a varsity team at Princeton University.

Our season lasts for four months, from November 1 through February, with the U.S. Women's Intercollegiate Championship usually played in the first weekend in March. In the East, at least, when outdoor tennis and field hockey are at an end, college women who are athletically oriented and have had racquet experience and who want to keep in shape over the winter are trying this relatively new college sport for women. Squash racquets has spread widely throughout the East, especially as colleges and universities have opened up their doors and athletic facilities to women.

An average tennis player with a basic knowledge of good strokes and footwork will find this fascinating sport called squash racquets quite challenging and different from any other racquet sport she has played. Given constant, proper instruction (meaning five times a week) plus much encouragement during her first four to six weeks of play, the college player finds that those squash walls are not frustrating enemies any more, but friends. Gradually, inevitably, she knows and senses where she is, where to go, what to do – and does it! Then she discovers that just getting the ball to the front wall is not enough. She will have to have enough control of the ball to place it where her opponent is *not* and this is based, of course, on a feeling of where her opponent is at any given moment. This is the time, if squash "gets to her," that she becomes addicted to this game that is part billiards, part handball and part tennis. She experiences the thrill and satisfaction of moving from one difficult plateau to another, and if the player can survive some periods where improvement is hard to envision, by the end of the season she will become a good college player and proud of it.

She's launched and ready for another season when she can refine her game, figure out placements, learn a variety of shots and analyze

just how she is going to try to beat that opponent of hers who is *always* beside her in the court.

Basic Strokes and Elementary Suggestions

The racquet is held as you would grasp a hammer. The basic forehand stroke is a modified tennis stroke, in a sense. Simply, the squash racquet is brought directly back and then forward with the elbow in close to the body. You should have the feeling of holding a fly swatter and, standing sideways to the front wall, you swat the fly against that wall. Your fly swatter gets the fly with a quick, flat stroke. The same is true for the backhand. A second interpretation is that you stroke as if skipping a flat stone across the water, standing sideways to the stream.

Remember that with these basic strokes the height of the tell-tale (your so-called "net") is 17 inches, in contrast to the tennis net which is 36 inches high. Therefore you must crouch down toward the level of that tell-tale. Squash racquets is a *down* game because the ball bounces fast and low, and you must be ready to move in any direction quickly.

The two-handed backhand is *out* in squash. By holding the grip with two hands, you make impossible a quick, balanced turn and a long reach for the ball.

Try not to hold the racquet throat with your nonplaying hand. This tends to position your racquet too high and allows you to stand up straight, which you do not want to do. Keep the racquet head directly in front of you and be ready for either a forehand or backhand.

The above are a few elementary suggestions in starting the game. You learn constantly as you play on the court. Unlike tennis, you can master all the strokes and shots by practicing alone.

A beginner who plays regularly usually improves rapidly. It is a quick-thinking, fast-moving sport, and there is a tremendous feeling of accomplishment when you finally realize that perhaps you have mastered the walls and some of your opponents!

Did You Know?

Compiled by MARIGOLD A. EDWARDS
University of Pittsburgh

.... that squash everywhere else in the world is different from that played in North America?
.... that squash has been added to the Presidential Sports Award program?
.... that there are more than 5,000 squash courts across the United States?
.... that Australia dominates world squash?
.... that the Babe Ruth of squash is a Pakistani named Hashim Khan?
.... that one court costs about $25,000 to build?
.... that "soft" (Australian) ball tournaments are being played during the summer months in the United States?
.... that for the first time in this country there is a squash magazine, called *Squash Racquets USA*?
.... that Heather McKay of Australia has not lost a match in 11 years?
.... that squash is one of the fastest court games in the world?
.... that the serve in squash is not the stumbling block to the beginning player that it is in tennis?
.... that the ball can travel at the speed of a baseball pitcher's fast ball (120+ mph)?
.... that squash doubles is played with a livelier ball than squash singles?
.... that squash is strongest in ex-colonies of Britain (Australia, New Zealand, India, Pakistan, Egypt and South Africa) and countries of the United Kingdom?
.... that Princeton University's Jadwin Gym is probably the finest squash facility in this country?
.... that the energy expenditure for squash is 650+ calories per hour?
.... that in cold courts the ball is as hard and dead as a rock but warms up as play progresses if it is hit hard many times?
.... that the first public courts (run commercially) in the United States were opened at Berwyn, Pennsylvania in October 1973?
.... that a squash racquet is the same length as a tennis racquet?

Women's Intercollegiate Squash

BETTY RICHEY

Betty Richey is chairman of the Physical Education Department and coach of both men's and women's varsity squash teams at Vassar. She is also a member of the NAGWS Squash Guide Committee.

Intercollegiate squash for women has finally come into its own. For years women's colleges have offered squash in the physical education program, but the few colleges with facilities and the distances between them made competition difficult. The United States Women's Squash Racquets Association has generously provided coaching, clinics and exhibition matches, but the real growth in the sport for women has come with the introduction of coeducation in traditionally male colleges. These colleges are now sharing their fine squash facilities with the women, who in turn are taking full advantage of the opportunities to learn the game and to compete on the intercollegiate level.

In addition to the matches arranged between colleges during the season there are two tournaments open to college players. One is the College Division of the USWSRA's Howe Cup Matches where teams from the various districts play each other over a three-day weekend early in February. For the past several years this tournament has been held at the Lawn Club in New Haven but its limited facilities necessitated use of the Yale courts by the new collegiate entry in 1973.

In this first year in Howe Cup competition six colleges – Princeton, Trinity, Vassar, Yale, Dartmouth and Penn – entered both A and B teams. Mrs. William Howe, a former national champion for whom the U.S. event was named, donated a permanent trophy to the College Division. This year it was won by Princeton, coached by Betty Howe Constable, also a former national champion. Trinity College, coached by Jane Millspaugh, won the B team competition. It is hoped that college players, motivated by seeing the top women in action at these matches, will continue to play after college and participate in the activities of the Association.

In contrast to the Howe Cup, the National Intercollegiate tournament is an individual elimination tournament with no attempt to consider team points. Eligibility is based on the AIAW policy for national championships: "A student is eligible if she has participated on her institution's intercollegiate team during the majority of its

recent season which includes a majority of practices and a majority of events. However, if the institution does not have an intercollegiate team in this student's specific sport, but approves her participation, she is eligible." This tournament has grown in eight years from a handful of participants to a total of 47 competitors from 14 different colleges. The 1973 tournament at Wesleyan College was won by Lee Howard of Radcliffe, who defeated Barbara Sands of Dartmouth in five games. From now on the intercollegiate champion wins a cup given by the USWRA. As a result of these matches, as well as team competition during the season, national rankings for ten college women were established, representing another first for 1973. They are:

1. Lee Howard – Radcliffe
2. Barbara Sands – Dartmouth
3. Sally Fields – Princeton
4. Mel Tobin – Wellesley
5. Beverly Gellner – Westminster Choir College
6. Jane Young – Vassar
7. Ruth Gerrity – Vassar
8. Emily Goodfellow – Princeton
9. Genie Ware – Wellesley
10. Ruth Birney – Wellesley

The tournament will be played at Princeton University in 1974 and at Dartmouth in 1975.

The college division of the USWSRA has district or area status and two representatives with voting power (preferably a coach and a student) on the executive board of that parent organization. All players must be members of the Association. For further information, contact the College Development Chairman, Ann Wetzel, 1324 Partridge Lane, Villanova, PA 19085.

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Using a Target Spot

ANN WETZEL
and MARIGOLD A. EDWARDS

Ann Wetzel is recreation supervisor and coach of racquet sports for women at the University of Pennsylvania, Philadelphia. Five-time National Doubles and 1964 National Singles Champion, she played on the international Wolfe-Noel Cup team for several years. She is currently College Development Chairman of the USWSRA.

Marigold A. Edwards, a New Zealander, is associate professor at the University of Pittsburgh, where she earned her Ph.D. degree. Former Canadian Open Singles champion and ranked second in the U.S., she has captained international teams to England and Australia.

Squash is a game for which you can perfect the stroking skills in a court by yourself. The target spot method provides patterns for practice that are at the same time basic patterns for play. Since this method facilitates ball control, use of a target spot during early learning and practice will heighten both performance and enjoyment.

Remember, the basic object of all racquet sports is essentially the same: driving the ball deep in the court, then setting up the kill or "put away." Since points are gained either by error (yours or your opponent's) or by placement, you must be skillful enough not only to keep the ball in play, thus negating error on your part, but also to *place* the ball, preferably where your opponent is *not*, but at least making her move!

The targets (one-inch round, red stick-on markers) allow you to focus on the "right" spot – guiding your aim until you have learned which spot on the wall, from what position on the floor, will produce the desired result. At this point your squash stroking has become predictable. You can place the ball where you want, thus freeing yourself to concentrate on strategy. And basic strategy requires that you *place* the ball where your opponent is *not*, preferably – but at least making her move!

These target spot patterns for practice can easily be expanded into a package of self-checking drills for skills, and are available from Ann Wetzel, who designed and tested the series. The target spot patterns and drills are based on the recommended sequence: mastering the basic swing and deep court game; learning to stroke the ball in the air (volley); and cultivating a good serve, as applied to lone practice (see Figure 1).

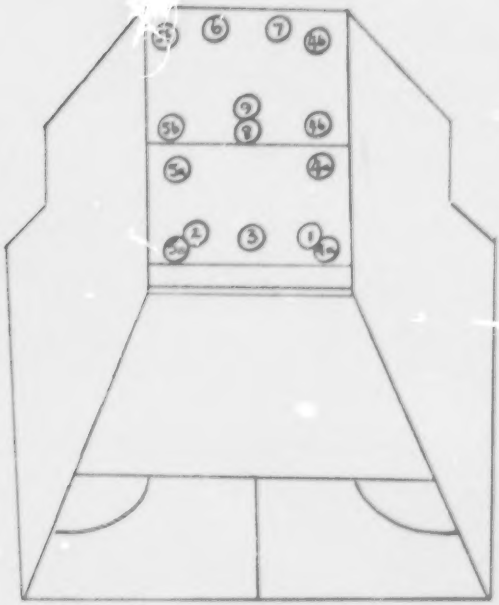

Figure 1. Diagram of target spots

I. Down-the-line Drills:

Target 1 (forehands) and Target 2 (backhands)

The target is placed one racquet length above the top of the tin and one racquet length in from the side wall. The ball should travel parallel to the side wall (without touching it) and bounce just behind the red line on the floor (this is optimal length). If you cannot get the ball to bounce behind the red line (not enough oomph!), move your target spot a little higher on the wall and yourself a little closer.

II. Cross-court Drills:

Target 3 (forehands from the right side of the court and backhands from the left)

Do not hit any forehands from the left side or backhands from the right side of the court. Ideally, the ball will bounce just behind the red line on the floor without touching the side wall – but this is hard to do. To gain depth, aim both higher and a little to the left of target 3 from the forehand side and a little to the right from the backhand side.

III. Volley Drills:

Offensive, Target 4a (forehands) and Target 5a (backhands); Defensive, Target 4b (forehands) and Target 5b (backhands)

Set the ball up by using a firm underhand stroke, aiming above the red line on the front wall. Keep the elbow close to the body and high. The volley just above the tin will bounce very short, otherwise the ball should travel parallel to the side wall (without touching it) and bounce just behind the red line on the floor.

IV. Service Drills:

Lob Serve, Target 6 (from the right service court) and Target 7 (from the left service court)

Aim approximately three racquet lengths above the service line. The ball should brush the side wall and drop vertically down the back wall from the highest point possible.

Slice Serve, Target 8 (from either service court)

Aim as close to the service line as possible without hitting it.

Hard Serve, Target 9 (from either service court)

The aim varies, but one racquet length above the service line is a good start. It is an advanced skill.

Practice? Yes! But do not miss the opportunity to play. The play situation is the application of your practice. It is a measure of your learning. So get into the play situation and aim for the now invisible targets to *place* your ball, preferably where the opponent is *not* but at least making her move!

A Basic Approach to Doubles Squash

R. WILLIAM DANFORTH

R. William Danforth, an investment banker in Pittsburgh, is a three-time winner of both the national doubles and Canadian doubles titles.

Singles in slow motion! Although there are not more than 400 courts across the country, doubles squash is popular among those "in the know" and those for whom the quick stop and start of singles is no longer feasible, wise or of interest. It usually happens that one's introduction to squash is singles squash; the progression to doubles squash is fortuitous since the skills (techniques and shots) are the same, but the much larger court with four players swinging racquets makes for very specific applications of strategy, which is the essence of doubles squash.

With twice the number of players at one time on an enlarged singles court, the opportunities for adjusting one's play to compensate effectively for the strengths and weaknesses of the opposing pair provide a stimulating physical and mental exercise. The floor playing area for doubles squash is approximately twice that for singles. More significant, perhaps, is that the court height is four feet higher.

As a general rule, it follows that the time period between shots is greater in doubles than in singles, thereby providing a better opportunity to select the right shot at the right time more intelligently, including the little used lob. In singles, to the contrary, many outstanding players mentally condition themselves to execute almost automatically depending on the location and speed of the ball on the court at a particular point in time. This is not totally desirable, for proper strategy and deceptive execution play an important role in every singles and doubles match.

In addition to hitting more shots with a purpose, the doubles game demands an ability to compensate and adjust not only to the strengths and weaknesses of your opponents but also to your partner. Unlike in tennis, the movement of play forward and back is not in unison. Primarily this is true because the side walls and back wall provide an opportunity for one member of the team to make a save return when both players are not caught up front at the same time. Expanding this theory a bit further, one can see that knowing where all players are situated on the court relative to the squash ball is exceedingly important at all times.

Combining this knowledge and learning the tendencies of your opponent to hit certain shots under a certain set of circumstances permit a team to defense their opponents properly. Working and thinking together, a doubles team should always be prepared to cover the entire court instantaneously. This implies that there will be times when the right court player will be covering some shots on the left side of the floor area and the left court player on the right side. The successful working out of this phase of the game requires a sensitive appreciation of your partner's feelings and capabilities.

In summary, a situation where two players on a squash court of 1,125 square feet play against two other players in the same congested area presents a stimulating opportunity for outwitting one's opponent in many ways. While attempting this feat, more than enough vigorous exercise can be obtained in a short period of time.

Squash Racquets Officials—Their Duties

BETTY SHELLENBERGER

Betty Shellenberger, instructor in physical education at Chestnut Hill College, Philadelphia, is a former ranking player and member of the international Wolfe-Noel Cup team. She has also held the U.S. Women's Squash Racquets Senior Singles title. A past president of the USWSRA, she is currently chairman of the Referees Committee.

Any squash racquets match played in a competitive situation should have at least one official to oversee the conduct of play even though she may only keep the score. This allows the players to concentrate on the game and so have a better match. In any tournament, the semifinal and final matches should have a full complement of officials, that is, a referee, two judges and a marker (scorekeeper).

The *referee* shall control the match from the time the players enter the court, call service faults and foot faults, determine if the ball is legally played (double bounce, carry, ball not hitting the front wall) and call or award lets. She shall limit the time of the warm-up (not more than five minutes) and the time between games (not more than two minutes except after the third game when it shall be no longer than five minutes). She shall see that no player leaves the court without permission except at the end of the third game. She shall sit at the center of the court, and shall introduce the players. She shall have at least one extra ball available during a match.

The *judges* shall act only on a player's appeal of a decision of the referee. They may be of assistance, at the request of the referee, in the calling of service faults on the side wall and foot faults. They must be prepared to give a decision on any appeal of a "let" call, as well as on service faults, double bounces, carries and whether or not the ball has hit the front wall. The judges shall sit or stand at the extreme right and left sides of the court.

As the duties of these officials concern lets and balls in play, it is important that they be well acquainted with the rules of the game, especially those regarding keeping out of an opponent's way, a ball in play hitting a player, and lets. Briefly, a decision to award a let is made when a player requests a let or, rarely, to prevent injury, or when there is outside interference with play such as a ball coming in from another court or something dropped into the court from the

gallery. These latter occurrences require an immediate call of "let" by the referee. When awarding a let that is requested by a player, the referee shall be sure that the player could have reached the ball, that she did not wait to see what happened to a shot on which there was interference before requesting a let. The judges act only on an appeal by a player. Because of their positions, they have a different angle to the players than the referee and so can present another viewpoint. They must both disagree with the decision of the referee for that decision to be changed.

On rare occasions the referee may award a let point for an unnecessary violation of the rules – that is, the player fails to make the necessary effort to avoid the violation or the player has repeatedly failed to make the effort to avoid similar violations.

The referee must be able to evaluate the ability of the players to move about the court. All decisions should be given with a firm tone of voice but must be fair to the players.

These are very general statements concerning the roles of the referee and the judges. A very complete booklet, *Instructions to Referees,* is obtainable from the men's squash association, the USSRA, and should be in the hands of all who are really interested in becoming squash racquets referees.

The *marker* shall keep the score of the match, calling it out in a loud, clear voice after each point. She shall know who is serving and from which side of the court. If there is an interruption of play during a game, she must know who is to serve and from which court. She should remember that a player having a choice of court to serve still has a choice if that first point is replayed.

There are two methods of scoring a squash racquets match. One uses a score sheet with blocks marked from 1 to 18. The letters R (right) and L (left) are placed beside a player's name under the figure indicating what her score is at the time of serving. A line is drawn through a player's last scoring block when she loses a point so that the marker knows which player is serving. A sample of such scoring is:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Player A	R	L	R	L	R	L	R	L	R									
Player B	R	L	L	R	L	R	R	L										

Player B is serving from the left; the score is 8-9.

A second system of scoring, developed by Edwin Bigelow, gives a more accurate picture of how a match has progressed. The marker records the point number each time he marks down the score, using

a dot in the upper right hand corner to indicate when the player is serving from the right court. For example, A wins the toss and elects to serve from the right and an R is placed by her name. B wins the first point so a "1" is placed by her name with a dot to indicate she is serving from the right; a "0" is placed beside A's name to indicate this is the first point. B wins the second point so a "2" is placed in the next space. A wins the third point so a "1" with a dot is placed in her third space as she will be serving from the right. A sample of this scoring is:

Player A	R	0		1'	2	3'	4					5'	6	7'	8	9'		
Player B		1'	2					3	4'	5	6'						7'	8

Player B is serving from the left; the score is 8-9.

You can practice scoring when you are waiting your turn to play a competitive match by scoring a match already in progress even if you do not call out the score. You will also become aware of the duties of the referee at the same time. Often the referee and marker can be one person in the early rounds of a tournament.

Good officials in any sport make the game more enjoyable for the players. We need them in squash racquets; to help out by becoming an official.

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Revised by MARIGOLD A. EDWARDS
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United States Squash Racquets Association
Singles Rules

1. Server. At the start of a match the choice to serve or receive shall be decided by the spin of a racquet. The server retains the serve until he loses a point, in which event he loses the serve.

2. Service. A ball is in play from the moment at which it is delivered in service until

(a) the point is decided;

(b) a fault, as hereinafter defined is made; or

(c) a let or let point, as hereinafter defined, occurs.

At the beginning of each game, and each time there is a new server, the ball shall be served from whichever service box the server elects and thereafter alternately until the service is lost or until the end of the game. If the server serves from the wrong box, there shall be no penalty and the service shall count as if served from the correct box, provided, however, that if the receiver does not attempt to return the service, he may demand that it be served from the other box, of if before the receiver attempts to return the service, the referee calls a let, (as hereinafter defined), the service shall be made from the other box.

The server, until the ball has left the racquet from the service, must stand with at least one foot on the floor within, and not touching the line surrounding the service box and serve the ball onto the front wall above the service line and below the 16-inch line before it touches any other part of the court, so that on its rebound (return), it first strikes the floor within, but not touching, the lines of the opposite service court, either before or after touching any other wall or walls within the court. A ball so served is a good service, otherwise it is a fault.

If the first service is a fault, the server shall serve again from the same side. If the server makes two consecutive faults, he loses the point. A service called a fault may not be played, but the receiver may volley any service which has struck the front wall in accordance with this rule.

3. Return of Service and Subsequent Play.

(a) To make a good return of a service or of a subsequent return, the ball must be struck on the volley or before it has touched the floor twice, and reach the front wall on the fly above the telltale, and it may touch any wall or walls within the court before or after reaching the front wall. A return is deemed to be made at the instant the ball touches the racquet of the player making the return.

(b) If the receiver fails to make a good return of a good service, the server wins the point. If the receiver makes a good return of service, the players shall alternate making returns until one player

fails to make a good return. The player failing to make a good return loses the point.

(c) Until the ball has been touched or has hit the floor twice, it may be struck at any number of times.

(d) If at any time the ball hits outside the playing surfaces of the court, which includes the ceiling and/or lights or hits a line marking the playing surfaces of the court (except on the first service, when it is one fault), it is a point against the player so hitting the ball.

4. Score. Each point won by a player shall add one to his score.

5. Game. The player who first scores 15 points wins the game excepting that:

(a) At "13 all" the player who has first reached the score of 13 must elect one of the following before the next serve:

(1) Set to 5 points—making the game 18 points.

(2) Set to 3 points—making the game 16 points.

(3) No set, in which event the game remains 15 points.

(b) At "14 all," provided the score has not been "13 all," the player who has first reached the score of 14 must elect one of the following before the next serve:

(1) Set to 3—making the game 17 points.

(2) No set, in which event the game remains 15 points.

6. Match. A match shall be the best three out of five games.

7. Keep Out of Opponent's Way. Each player must get out of his opponent's way immediately after he has struck the ball and

(a) Must give his opponent a fair view of the ball, provided, however, interference purely with his opponent's vision in following the flight of the ball is not a let;

(b) Must give his opponent a fair opportunity to get to and/or strike at the ball in any position on the court elected by his opponent;

(c) Must allow his opponent to play the ball from any parts of the court elected by his opponent;

(d) Must allow his opponent to play the ball to any part of the front wall or to either side near the front wall.

8. Ball in Play Touching Player. If a ball in play, after hitting the front wall, but before being returned again, shall touch either player, or anything he wears or carries (other than the racquet of the player who makes the return), the player so touched loses the point, except as provided in Rule 9(b).

If a ball in play touches the player who last returned it or anything he wears or carries before it hits the front wall, the player so touched loses the point.

If a ball in play, after being struck by a player on a return, hits the player's opponent or anything his opponent wears or carries before reaching the front wall:

(a) The player who made the return shall lose the point if the return would not have been good.

(b) The player who made the return shall win the point if the ball would have gone directly from the racquet of the player making the return to the front wall without first touching any other wall.

(c) The point shall be replayed as a let (Rule 9) if the return, except for such interference, would have hit the front wall fairly and (1) would have touched some other wall before so hitting the front wall, or (2) has hit some other wall before hitting the player's opponent or anything he wears or carries.

When there is no referee, if the player who made the return does not concede that the return would not have been good, or alternatively, if the player's opponent does not concede that the ball has hit him (or anything he wears or carries) and would have gone directly to the front wall without first touching any other wall, the point shall be replayed as a let (Rule 9).

In all cases covered by the rule, play shall cease even though the ball goes up.

9. Let. A let is the stopping of play and the playing over of a point.

In addition to the lets described in Rules 2 and 8 (c), the following are lets if the player whose turn it is to strike the ball could otherwise have made a good return:

(a) When such player's opponent violates Rule 7;

(b) When owing to the position of such player, his opponent is unable to avoid being touched by the ball;

(c) When such player refrains from striking at the ball because of a reasonable fear of injuring his opponent;

(d) When such player before actually hitting or in the act of striking or striking at the ball is touched by his opponent, his racquet or anything he wears or carries;

(e) When on the first bounce from the floor the ball hits on or above the 6½ foot line on the back wall;

(f) When a ball in play breaks. If a player thinks the ball has broken while play is in progress he must nevertheless complete the point and then immediately request a let, giving the ball to the referee for inspection. The referee shall allow a let only upon such immediate request if the ball proves in fact to be broken.

A player may request a let or a let point. A request by a player for a let shall automatically include a request for a let point. Upon such request, the referee shall allow a let, let point, or no let.

No let shall be allowed on any stroke a player makes unless he requests such let before actually hitting or in the act of striking or striking at the ball.

The referee may not call or allow a let as defined in this Rule 9 unless such let is requested by a player; provided, however, the

12. Attire and Equipment. (a) Player's attire must be white. Any controversy over attire shall be decided by the referee, whose decision shall be final.

(b) The standard singles ball of the United States Squash Racquets Association shall be of black rubber 1.700 to 1.750 inches in diameter and shall weigh 1.12 to 1.17 ounces. It shall be pneumatic. At a ball temperature of 70° to 74° F., it shall have a rebound on a steel plate between 24 to 26 inches from a drop of 100 inches. After 10 minutes or more of play or at a ball temperature of 83° to 84° F., it shall have a rebound on a steel plate of 27 to 30 inches from a drop of 100 inches. For a supplementary test in a court, after 10 minutes or more of play the ball shall have a rebound from the 6½ feet rear red line of not more than 25 inches and not less than 23 inches.

The difference in rebound between a ball before play and after play of 10 minutes or more, whatever the temperature of the court or the ball, shall not exceed 20 percent of the before play rebound.

For purposes of this rule a minimum of 300 blows by the authorized testing device of the Association shall be deemed to be the equivalent of the 10 minutes or more of play referred to above, since this procedure yields a ball temperature of 83° to 84° F.

Manufacturers may use the testing device of the Association which is available through the chairman of the Committee on Courts, Bats and Balls or procure their own.

(c) The racquet or bat shall be made of wood and have a circular shaped head with a diameter not exceeding 9 inches, and shall not exceed 27 inches overall length, with a weight of approximately 10 ounces. It shall be strung with gut or a substitute material, provided it is not metal. Materials or racquet designs which do not conform with this section, or the generally recognized manufacturer's standards, should be submitted to the Executive Committee for approval prior to manufacture or usage.

13. Condition of Ball. (a) No ball, before or during a match may be artificially treated—that is, heated or chilled.

(b) At any time, when not in actual play, another ball may be substituted by the mutual consent of the contestants or by decision of the referee.

14. Condition of Court. No equipment of any sort shall be permitted to remain in the court during a match other than the ball used in play, the racquets used by the players, and the clothes worn by them. All other equipment, such as extra balls, extra racquets, sweaters when not being worn, towels, bathrobes, etc., must be left outside the court. A player who requires a towel or cloth to wipe his eyeglasses should keep same in his pocket or securely fastened to his belt or waist.

15. **Referee.** (a) A referee shall control the game. This control shall be exercised from the time the players enter the court. The referee may limit the time of the warm-up period to five minutes, or shall terminate a longer warm-up period so that the match commences at the scheduled time. The referee's decision on all questions of play shall be final except as provided in Rule 15(b).

(b) Two judges may be appointed to act on any appeal by a player to a decision of the referee. When such judges are acting in a match, a player may appeal any decision of the referee to the judges, except as provided in paragraph (d) hereof. If one judge agrees with the referee, the referee's decision stands; if both judges disagree with the referee, the judges' decision is final. The judges shall make no rulings unless an appeal has been made. The decision of the judges shall be announced promptly by the referee.

(c) A player shall not state his reasons for his request under Rule 9 for a let or let point or for his appeal from any decision of the referee or judges, provided, however, that the referee may request the player to state his reasons.

(d) After giving due warning, the referee in his discretion may disqualify a player for speech or conduct unbecoming to the game of squash racquets. This decision of the referee may not be appealed.

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referee may call a let at any time (1) when there is interference with play caused by any factor beyond the control of the players, or (2) when he fears that a player is about to suffer severe physical injury.

On the replay of the point the server (1) is entitled to two serves even though a fault was called on the original point, (2) must serve from the correct box even though he served from the wrong box on the original point, and (3) provided he is a new server, may serve from a service box other than the one he selected on the original point.

10. Let Point. A let point is the unnecessary violation of Rule 7 (b), 7 (c) or 7 (d). An unnecessary violation occurs (1) when the player fails to make the necessary effort within the scope of his normal ability to avoid the violation, thereby depriving his opponent of a clear opportunity to attempt a winning shot, or (2) when the player has repeatedly failed to make the necessary effort within the scope of his normal ability to avoid similar violations. The player unnecessarily violating Rule 7 (b), 7 (c) or 7 (d) loses the point.

When there is no referee, if a player does not concede that he has unnecessarily violated Rule 7 (b), 7 (c), or 7 (d), the point shall be replayed as a let.

11. Continuity of Play. Play shall be continuous from the first service of each game until the game is concluded. Between each game, play may be suspended by either player for a period not to exceed two minutes, and between the third and fourth games play may be suspended by either player for a period not to exceed five minutes. Except during the five-minute period at the end of the third game, no player may leave the court without permission of the referee. The referee may suspend play for such period as he may consider necessary. If play is suspended by the referee because of an injury to one of the players, such player must resume play within one hour or default the match. The foregoing provisions shall be strictly construed. Play shall never be suspended to allow a player to recover his strength or his wind. The referee shall be the sole judge of intentional delay, and, after giving due warning, he must disqualify the offender.

In the event the referee suspends play other than for injury to a player and for some cause beyond the control of both players, such as the failure of the electric lighting system, play shall be resumed when the cause of such suspension of play has been eliminated, provided, however, if such cause of delay cannot be rectified within one hour, the match shall be postponed to such time as the tournament committee determines and the match shall be resumed from the point and game score existing at the time the match was stopped unless the referee and both players unanimously agree to play the entire match or any part of it over.